



JUNE 1992

## A Bright Future for Amateur Radio



**Springfield Estates Amateur Radio Club**  
See Page 35

**Field Day - June 27 - 28 - See Page 9 for List of Field Day Sites**  
**T-MARC Coordination Maps - Pages 25-32**

**FCC Highlights** • **ARRL Report** • **VE Exam Schedule** • **Public Service Report**  
**DX Column** • **Elmer's Corner** • **Club Reports** • **Want Ads** • **Much More**  
Be a Know it All; Read Auto-Call

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Auto-Call is the Official Journal of the Foundation For Amateur Radio, Inc.

**\$1.00**

# THE NEW GENERATION ROTATORS

THEY'RE NOT YOUR FATHER'S HAM "M"

Rotator Comparison Chart

The New Generation

Model Specs	Create RCS	Create RCSA	Create RCSB	Emoto 105TSX	Emoto 747SRX	Emoto 1105MSX	Emoto 1200FX	Emoto 1300MSX	Emoto 1800FSX	Old Generation
Rotator Torque Fwd	43	116	160	37	50	57	143	215	287	67
GD <sup>2</sup> Kgm <sup>2</sup>	N/A	N/A	N/A	100	400	700	1000	1800	3000	N/A
Brk Static Torque Fwd	506	1085	1450	215	502	717	1290	1792	2150	417
Wind Load in Tower (8)	10	25	25	**	22	27	27	33	36	15
Mast mount	4	5	7	5	9	12	12	15	16	7.5
Rotating speed 3600	60-150 sec variable	60-150 sec variable	60-150 sec variable	55	35	65	40	77	80	60
Rev Delay	None	2 sec	3 sec							None
Preset	Dot 3	Dot 3	yes	**	**	Dot	yes	yes	yes	no
Computer	no	no	no	no	yes	yes	yes	yes	yes	no
Power 120V 60Hz	80VA	140VA	200VA	70VA	70VA	90VA	120VA	150VA	260VA	260VA
Mast Dia	2.25 in	2.25 in	2.25 in	2.25 in	2.25 in	2.25 in	2.25 in	2.25 in	2.25 in	2 in
Control wire	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	8 cond
Vertical max load #	880	1540	1540	660	1100	880	1760	1760	2200	400
Mast wire	13	17	20	15	9	11	11	13	39.5	24
Brake type	worm drive	worm drive	worm drive	disk	friction	friction	friction	friction	friction	wedge
Self center	yes	yes	yes	Adj	Adj	Adj	Adj	Adj	Adj	no
Special notes	3-6	3-6	3-6	6	1-6	6	2-6	6	6	4-7
Pricing (\$)	\$269.00	\$449.95	\$799.00	209.95	399.00	589.00	679.00	1099.00	3272.00	369.95
Wt/Preset	\$379.00	\$528.95				\$663.00				

Notes

- 1 Turns Tribune 470 in 35 seconds
- 2 Variable speed 40 sec max
- 3 EEB price as of 5/91 sub to change
- 4 T2X and HamIV have same motor and gear train parts
- 5 Wind Load in Sq. Feet
- 6 120/220 speed transformer

## THE NEW GENERATION

An entire generation of amateurs have grown up knowing only one rotator manufacturer. Those old favorites are still popular. But, now a new generation of rotators are out to set high standards with innovative features such as: large machined steel gears, cast and machined aluminum cases, solid state controllers for smooth start/stop, preset, computer control and circular position indicators.

The bottom line is... strong, long term reliability, ease of operation and cost effectiveness. When you erect an antenna system the last thing you need is rotor problems!

## CREATIVE DESIGN ROTATORS

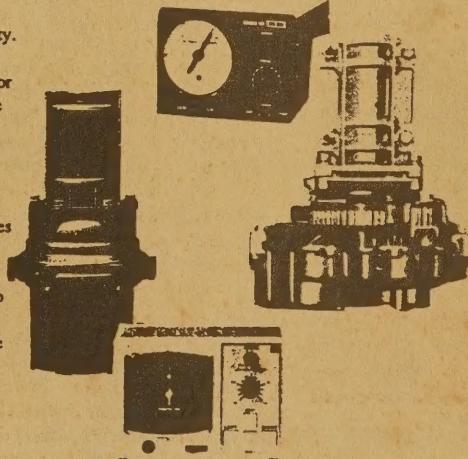
**CREATE** is serious about long term reliability. The **CREATE** RCS series rotators were designed with the serious DX'er in mind. Three models for medium, large and ultra large antenna arrays are available.

## ROTOR FEATURES OF RCS SERIES

\* Large strong reduction gear system provides long term reliability during years of rugged operation. \* Worm drive gearing provides powerful braking force and low backlash to keep your antenna in position during severe weather conditions. \* Cast and machined aluminum case provide the strength required for long lasting service. \* Mast clamp guides for ease of mast installation.

## CONTROLLER FEATURES OF RCS SERIES

\* Speed control using silicon control rectifiers allows slow speed without reduction in rotation torque. Rotating spec is constant 60 to 200 seconds per 360 degrees. \* Reverse delay control (RDC). Delays reverse command to rotor until antenna is at rest. Prevents damage to rotor antenna and tower system. \* Circular dial indicator, for quick accurate reading of antenna direction. Great circle overlay available for USA (west-cent-east). \* Preset (on 3 models) a must for quick setting of antenna direction. Just turn the knob to the new heading, the rest is automatic. Won't waste your time holding down the brake lever and wait.



## EMOTO ROTATORS

More than 60% of all Japan amateurs use EMOTO rotators. Many unique innovations and international patents have made EMOTO number one.

EMOTO has a fool proof method to calculate which of their rotators will satisfy your needs. This GD<sup>2</sup> formula considers your antenna (s) weight, boom and longest element length. The EMOTO sheet is in metric so one must convert weight 2.2lbs= 1kg and length in meters 3.3ft=1 meter. Calculate your GD<sup>2</sup> then compare EMOTO GD<sup>2</sup> spec above.

$$GD^2 = W \times \frac{L^2 + B^2}{12}$$

Where: W: weight of antenna (kg)

L: length of longest element (m)

B: length of boom(m)

## GD<sup>2</sup> EXAMPLES: Kgm<sup>2</sup>

TH7DX (437), TH3JR (63), 205BA (675), DISC7-3 (1300), A3S (61), A4S (173), KLM KT34XA (378), 3 ELE TRIBAND (150), 6 ELE TRIBAND (400), 20M 5 ELE (750), 15M 6 ELE (650), 40M 2 ELE SHORT BOOM (240), 40M 2 ELE FULL BOOM (800), 80M 2 ELE (1500), STACK ARRAYS 10M 5 ELE (60), 15M 5 ELE (200), 20M 5 ELE (750), 60+200+750=1010

EMOTO also has a robust AZ-EL rotator that has computer I/O ports. For those working satellites or EME moon bounce the EV700DSX should do the job, as rotating torque is more than double the YAESU G5400B AZ-EL.

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Deadline for copy is the 5th of the month. All contributions are welcomed, but the editor does reserve the right to edit or reject any portion of any copy.

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AUTO-CALL is published monthly as the official journal of the Foundation for Amateur Radio. Comments made by columnists do not necessarily reflect the opinions of the Foundation. No effort is made to investigate advertisers, therefore no warranty can be implied.

AUTO-CALL has paid subscriptions of over 1700 and a total circulation of about 2000. Copies are sold at local stores and a number of Complimentary and Swap copies are mailed each month. The magazine is entered as third class non-profit matter at the post office at Arlington, VA.

Subscription rate is \$8 a year.

Subscriptions received after the 15th of the month will be started with the following month's issue.

AUTO-CALL MAGAZINE  
P.O. BOX 7612  
FALLS CHURCH, VA 22040-1452

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AMSAT - Radio Amateur Satellite Corporation
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Arlington Amateur Radio Club
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Baltimore Radio Amateur Television Society
Capital City Amateur Radio Society
Capitol Hill Amateur Radio Society
Chaverim of the Greater Washington Area, Inc.
Columbia Amateur Radio Association
Department of State Amateur Radio Club
Fauquier Amateur Radio Club
Frederick Amateur Radio Club
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Friendship Amateur Radio Club
Goddard Amateur Radio Club
Green Mountain Repeater Association
Herndon Repeater Group
IBM Amateur Radio Club
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Stafford Amateur Radio Assn
Sterling Park Amateur Radio Club
Tri-County Amateur Radio Club
T-MARC, The Middle Atlantic FM & Repeater Council
Vienna Wireless Society
Washington Adventist Amateur Radio Association
Washington Area Young Ladies' Amateur Radio Club
Woodbridge Wireless, Inc.

## EDITORIAL

**Tony Young - WA3YLO**  
President, Foundation for Amateur Radio

### Let's Hear it for the Clubs

There are over 100 clubs in the greater Washington/Baltimore area. Some are 400 members strong, and others have three or four members. They all have one thing in common ... leadership!

Counting the "board of directors" population only, hundreds of involved hams keep clubs organized and, in general, vibrant community service groups. Read any Auto-Call public service report, and listen on the nets to the activity of this corps of movers and shakers.

In the midst of the negative news of violence, it is refreshing to see the impact of positive community action, such as "Christmas in April." This program, growing in many states, builds instead of destroys, and hams are providing support.

The list goes on, and the message is that clubs are good for the hobby, with structured, well organized support of groups in their own community. Newsletters, nets and club meetings invite us to help with this activity, and interest is growing.

If you do not belong to a club, consider joining one. You will find good information in the monthly club columns and a list of clubs on the masthead (page 3). If you are a member of a club, invite a friend to a meeting. When you attend meetings, thank those who dedicate themselves to making it a pleasant place to be . . . those who do the grunt work, the paper work, the technical work, and the public service.

Think of this! If it were not for clubs, where would you go on all those Sundays to trade your stuff for someone else's stuff.

Hooray for clubs, and their leaders.

Tony - WA3YLO

## INDEX

### COLUMNS

ARRL REPORT	11
DX COLUMN	15
FCC HIGHLIGHTS	7
PUBLIC SERVICE REPORT	17
SRAM - Amateur Radio in the USSR	23
SILENT KEYS	33
TRAINING	20
VOLUNTEER EXAMINER CO-OP.	21
WANT ADS	49

### SPECIAL FEATURES

Field Day Locations	9
T-MARC Coordination Maps	25

### CLUB REPORTS

AMRAD	46
Arlington Amateur Radio Club	47
Fauquier Amateur Radio Club	36
Department of State /VOA	42
Goddard Amateur Radio Club	41
Green Mountain Repeater Assn	44
MADRAS	44
Maryland Mobileers Amateur Radio Club	45
Montgomery Amateur Radio Club	39
National Capital DX Association	45
Northern Virginia FM Association	38
Ole Virginia Hams Amateur Radio Club	48
Prince George's Wireless Association	42
Southern Patuxent Amateur Radio Club	37
Springfield Estates Elementary School	35
Tri County Amateur Radio Club	34
Vienna Wireless Society	40
Woodbridge Wireless, Inc.	43

### ADVERTISERS

EEB Electronic Equipment Bank	2
G & G Electronics	50
Ham Radio Outlet	10
Maryland Radio	6
R.F. Connection	48
SkyPoint Ham Center	53
Virginia Micro System	39
Williams Radio	14

## Coming Events

- Jun 7 Ole Virginia Hams Hamfest, Manassas, Virginia  
Jun 7 Breeze Shooters Hamfest, Butler, PA (Pittsburgh). Info N3BPB  
Jun 21 Frederick Hamfest, Frederick, Maryland  
Jun 24 AFCEA Amateur Radio Operators' Luncheon (See page 33)  
Jun 27-28 Field Day - See Page 9 for locations
- July 12 Carroll County Hamfest & Computer Show, Westminster, Maryland  
July 12 North Hills ARC Hamfest, Pittsburgh PA. N3LAZ (412) 935-3343  
July 26 BRATS Hamfest and Computer Fest, Timonium, Maryland (p 16)
- Aug 2 Shennandoah Valley Hamfest, Berryville, Virginia  
Aug 8-9 Maryland/DC QSO Party. Info WA3AAT or WA3EOP  
Aug 16 Southern Patuxent Hamfest, Upper Marlboro, Maryland  
Aug 20-23 ARRL National Convention, Los Angeles, CA
- Sep 5-6 Shelby Hamfest, Shelby, North Carolina  
Sep 13 F.A.R. FEST, Gaithersburg, Maryland (page 38)  
Sep 19-20 Virginia Beach Hamfest, Virginia Beach, Virginia  
Sept ? ARRL Computer Networking Conference, Northern New Jersey
- Oct 8-10 AMSAT Space Symposium  
Oct 10-11 DXPO-92 Holiday Inn, College Park, MD  
Oct 11 Columbia ARA Hamfest, Howard County Fairgrounds  
Oct 18 Cumberland County Hamfest, Carlisle, Pennsylvania
- Nov 1 Mason-Dixon Hamfest, Westminster, Maryland
- Dec 6 HolidayFest '92, Largo, Maryland  
Dec 11 Southern Maryland ARC Annual Christmas Dinner/Meeting, Camp Springs, MD Elks lodge.

### 1993

- Apr 23-25 Dayton Hamvention  
Jul 17-18 Southeastern Division Convention, Atlanta, Georgia  
Aug 13-15 ARRL National Convention, Huntsville, Alabama

### 1994

- Apr 29,30 & May 1 Dayton Hamvention  
June 10-12 ARRL National Convention, Dallas, TX

### 1995

- Apr 28-30 Dayton Hamvention

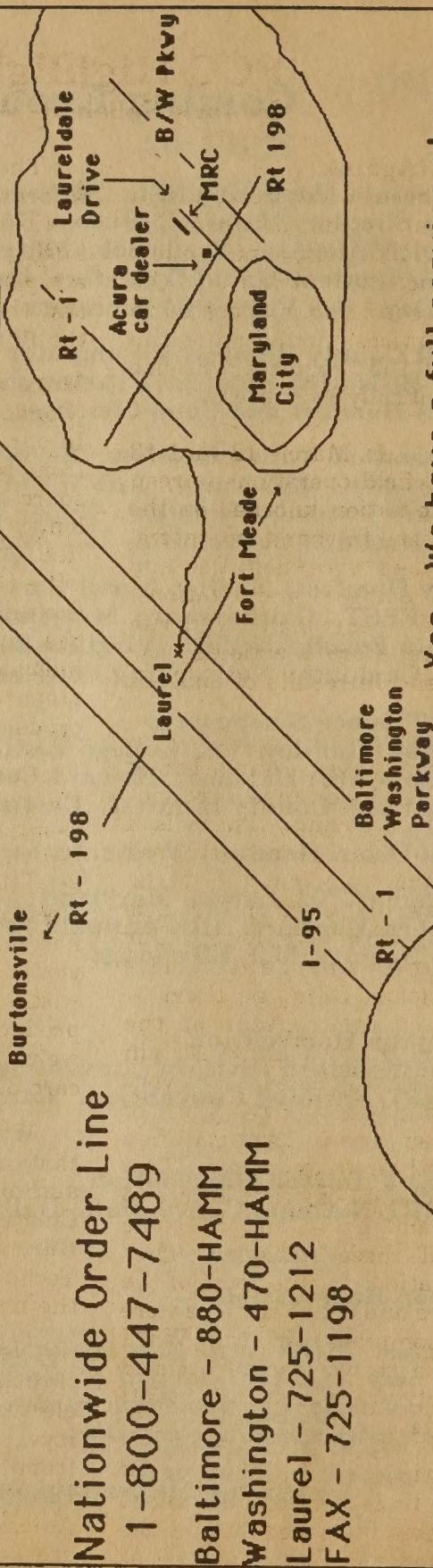
*Thanks to Bob Milligan - KI4MB and the SERA Repeater Journal for providing much of the above information. Please keep Auto-Call advised of coming Hamfests and other important Coming Events. We are anxious to provide our readers with timely information and help to avoid possible conflicts when scheduling activities.*

***We can use all the help we can get!***

# MARYLAND RADIO CENTER

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Washington D.C.

# FCC Highlights

by Jack Kelleher - W4ZC

## Freebanders Busted (Again).

For years there has been widespread illegal activity in the spectral region between the highest CB channel (27.405 MHz) and the low end of the 10 meter band (28.0 MHz.). (In the U.S. this portion of the spectrum is allocated to the Fixed and Mobile Services; furthermore, the Communications Act of 1934 requires a license to transmit unless specifically exempted)

According to W5YI, on March 12 and 13 engineers from all FCC field operations bureau (FOB) offices across the nation knocked on the doors of suspected illegal freeband operators. Some sixty six freebanders were identified and are in the process of being issued citations. Each could be assessed fines which could run into thousands of dollars. Formal action by the Commission is dependent on results of analysis of the data collected.

The W5YI Report quotes John Hudak (the manager of the FCC's long-range direction-finding (DF) network) as saying: "There is a very organized group of unlicensed stations operating around the upper portion of 27 MHz. We run periodic surveys to see if the level is dropping off or staying at a high level. Our monitoring network intercepted the transmissions -- did a lot of DFing on them -- and examined some of the content of the communication. From this we know certain groups that are very well organized -- are very consistent in coming on day after day. Many of the individuals were very active. We identified a lot of the nets and their frequencies. On a couple of days we asked all of our field offices to work on the project and go in and do some close-in monitoring of these stations. They made positive identification on 66 -- most of the major, organized groups and active stations were identified." Other comments in the W5YI Report indicate that there were some licensed ham operators involved, which one staff engineer found "a little unnerving".

Last year during a similar type of enforcement effort the fines were \$1,000. Since that time there is a new fee schedule and the current thinking is that the fine might be as much as \$8,000 for each station.

The W5YI writeup indicates that this information is preliminary and unofficial - Notices of Apparent Liability for Monetary Forfeiture (NALs) have not yet been issued; a report on the operation is still being prepared; and there is no decision yet on distribution of the final report.

## More on RFI and TVI

(Condensed from W5YI Report April 15)

In our April column we referred to a statement from an FCC Field Operations Bureau (FOB) source which implied that the FOBs would no longer be involved in local cases of RFI/TVI, and that Amateurs must necessarily deal directly with their neighbors. Fortunately this is not the full story according to the feature article in the April 15 issue of W5YI Report, which indicates that the Commission will shift its attention to the production of consumer products that are more immune to interference.

Ana Curtis, Attorney-Advisor to the FOB's Public Service Division, noted that the Communications Act of 1934 was amended several years ago to give the FCC authority to establish standards for RFI immunity for home electronic products. She said: "The Commission has not done so, because the industry said it would look out for itself and that market forces would operate so that consumers would prefer products that don't have these problems. What we've said is that the marketplace would take care of it."

We (W5YI) asked if there was any chance that the FCC would decide to use the legal authority it has to require RF-immune products. Curtis replied "We have asked the Private Radio Bureau and the Office of Engineering & Technology to look at the issues, for example, the impact of filters pre-installed in products".

New European regulations, to be in force throughout the European Community, require electronic products to demonstrate an adequate level of intrinsic electromagnetic immunity from outside interference. In the U.S. the Electronics Industries Association (EIA) and the American National Standards Institute (ANSI) are reportedly developing standards to reduce equipment susceptibility to interference.

## FCC Highlights - Continued

However, Terry Mahn, a private attorney specializing in communications, writing in the latest issue of EMC Test and Design magazine, said "Voluntary efforts by EIA and ANSI continue at a snail's pace and federal agencies, other than the military, profess little interest in regulating in this area". He predicted that U.S. manufacturers may find RFI immunity taking on added importance, if they want to market products overseas they will have to comply with Europe's regulations.

[Ed. Note: There seems to be a ray of hope expressed, here, that immunity standards will finally be developed AND ENFORCED for products marketed in the U.S. This applies particularly to telephones -- the more solid-state, low-voltage electronics they contain, the more susceptible they seem to be to interference, with rare exceptions.

And speaking of TVI, we Amateurs have for decades used low-pass filters to minimize interference to TV. Another side to TVI is to reduce the TV receiver's intrinsic vulnerability to HF interference by using a high-pass filter at the input to the TV. A good, cheap high pass filter is described by Bill Orr - W6SAI on page 100 of CQ magazine for May 1992.]

[Radio Shack has been receiving high marks for some of its EMI-resistant telephones and the company also offers a \$4.50 high-pass filter that does an excellent job of supressing interference to TV reception.]

### VE Irregularities

In our column in the January 1992 issue we briefed a Westlink report on alleged irregularities in VE testing in the Los Angeles area. It was indicated that the FCC had initiated its own investigation of VE testing for the California Amateur Radio School.

Evidently there was fire behind the smoke in that case. On April 23rd the Commission adopted an "Order to Show Cause and Suspension Order" proposing to revoke the Amateur Service station licenses and suspend the Amateur operator licenses of two Amateurs who were apparently "the operators of the California Amateur Radio School in Los Angeles, California at all times pertinent to this proceeding." The Order was addressed to Sandra Crane - N6TFO and Charles P. Pascal - WB6CIY.

The Orders allege that the respondents, prior to the administration of Amateur Service license examinations, had information that they used to tailor the content of their instruction at the school to include answers to all or most of the questions that would later be part of the examinations, while excluding from instruction the answers to most questions that would not be part of the examinations. "This last-described action by respondents constitutes an apparent willful and repeated violation of Section 97.17(e) of the Commission's Rules . . ."

The revocation/suspension order will go into effect 30 days after delivery of the Order unless the respondents request a hearing or submit a written statement in the matter.

### Illegal Operations

(from W5YI and the ARRL Letter)

Item: Donald W. Bishop - N0EA was issued an NAL on March 20, 1992 in the amount of \$10,000 for illegal pirate operation last fall. Bishop is charged with playing the taped transmissions of a long-active pirate known as "The Voice of Laryngitis" over his ham radio. The illegal operation allegedly took place on 15,050 and 7,420 KHz for several hours while Bishop was driving to Colorado. The FCC's long-range direction finding network pinpointed the pirate broadcasts and had Bishop stopped by the Colorado State Patrol on October 6, 1991.

Item: The FCC fined Richard E. Mattice of Zion Illinois \$16,000 for the June 1991 transmissions of fake MAYDAY signals using an unlicensed radio station aboard the vessel "It'l Do." The operator had radioed that the boat was in trouble on Lake Michigan and taking on water. Aided by radio direction finding equipment, the Lake County Sheriff's Marine Unit and Coast Guard concluded that Mattice was the operator who transmitted the distress signal when in reality an emergency situation had not existed.

Item: The FCC ordered Gerald A. Kawalec of Fulton Texas to pay \$750 for transmitting on an incorrect frequency. Kawalec had earlier said he did not know that the frequency was not available for marine use and that he was told by other radio operators to use the frequency or perhaps remembered an incorrect frequency. The FCC said Kawalec was knowledgeable regarding radio transmitters and used the frequency at prearranged times over a period of time.

## FCC Highlights - Continued

### Beating the System (occasionally).

Despite its announced desire not to become a "national zoning board" the FCC has preempted a town ordinance against satellite antennas in Deerfield NY. It is a victory for owners of home satellite dishes or other antenna facilities used in personal communications by private citizens.

Deerfield resident Joseph A. Carino installed a ten-foot satellite dish at his home, despite a local law against dish antennas and against any "tower type" antennas weighing more than 100 pounds on any lot less than one-half acre in size. No neighbors objected to Carino's antenna, but the town ticketed him for violation of the zoning code and denied him a variance for failure to show a necessary "hardship."

Unsuccessful appeals through the state and federal courts led him to request the FCC to preempt the local regulation. The FCC found quite a few defects in the Deerfield ordinance,

especially that, without explanation, it discriminated against certain kinds of satellite dish and tower structures but not others. Even very small dishes, considerably smaller than Mr. Carino's could have been banned by the town. The FCC ordered the ordinance preempted and the antenna is apparently free from danger of being seized or de-constructed by the town.

### An unusual RFI case

Next door neighbors of ham operator Joseph Michaels, W4DDV have lost their case in Federal Court to have Michaels of Tucson, AZ ruled a common law "nuisance." An Arizona court found that the FCC had exclusive jurisdiction over radio frequency interference matters and that state courts were precluded from remedying any alleged private nuisance caused by interference from the operations of a ham radio. The decision was upheld by the Appellate Court.

## FIELD DAY ACTIVITIES

Field Day is one of the most popular Amateur activities and one of our finest demonstrations of the Amateurs' dedication to preparedness for service in the public interest. Following is a list of Field Day activities, locations, and contacts. Join one of the groups this year and invite your friends to come and see Amateur Radio in Action.

**Alexandria/Arlington** - Ft. Ward Park, Braddock and I-395, **Alexandria, VA.**

Contact: Steve - WB4EEA (703) 780-7248; or Bob - KI4MB (703) 533-0650.

**Anne Arundel ARC** - Club Site, Queen Anne Bridge Rd & Waysons Rd, **Davidsonville, MD**

Contact: Tony - WA3YLO; (301) 262-1917

**Chaverim (VA)** Lake Fairfax Park, **Reston, VA.** Contact: Dan - KC4OCG (703) 281-2358

**Department of State** - On The Mall, **Washington, DC** Contact Tom Warren (301) 894-06678

**Fauquier ARC** - Across the street from the Jamesway store - Bob Taylor KC4CVG (703) 439-2786

**Herndon Lake Fairfax Park, Group Campground, Reston, VA.** Bill - N4WJN (703) 590-9562

**Laurel** - Rocky Gorge Dam, Brooklyn Bridge @ I-95, **Laurel, MD.** Pud W3DQI (301) 498-6293

**Madras** - Club House, 11800 Coakley Cir, **Rockville, MD.** Jean or Larry N3GKZ (301) 984-6112

**Maryland Mobileers** - Downs Park, **Pasadena, MD.** Contact: John - KO4A (301) 757-8148

**Mount Vernon** - Ft. Hunt Park, GW Parkway - **Alexandria, VA.** WB4EEA (703) 780-7248

**NASA/GODDARD** - Visitors Center, Space Flight Center, Soil Conservation Rd, **Greenbelt, MD.**

Contact: Vikki - KA3PVS (301) 249-2609

**Pentagon** - Lunga Reservoir, Quantico Marine Base, **Quntico, VA.** Spike K9MX (703) 659-6241

**Rock Creek** - Isaak Walton League Park, adjacent to Montgomery Air Park, **Gaithersburg, MD**

Contact: John Halweg - N3ETD (301) 942-7982

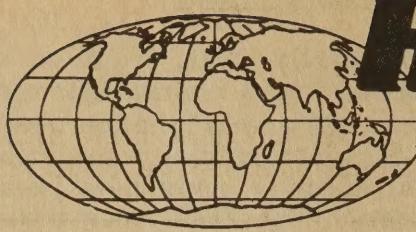
**St. Mary's** - Leonardtown Middle School, Rt 5, **Leonardtown, MD.** Contact: Tom (301) 862- 9850

**Shenandoah Valley** - (Hampshire Co), **Spring Gap Mtn, WVA.** Contact: Guy (703) 722-4952

**S. Patuxent** - Cove Point Park, Little Cove Point Rd, **Lusby, MD.** Dwayne (301) 586-2177

**Sterling Park** - Park View High School, West Laurel St., **Sterling, VA** W4MLJ (703) 430-3842

**Vienna Wireless** - Burke Lake Park, Rt 123, **Burke, VA.** Contact: Margy - N2JRG (703) 620-1727



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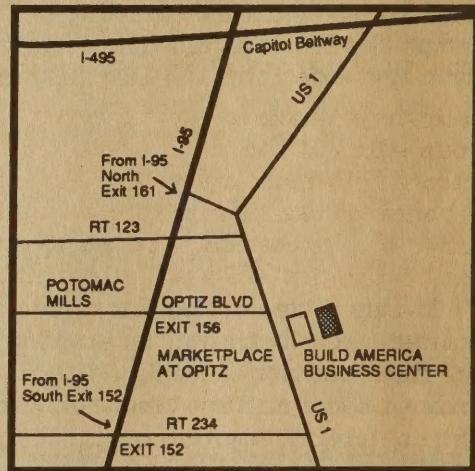
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# American Radio Relay League Report

By John Swafford -- W4HU

*This ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Any League member may subscribe to the ARRL LETTER.*

**W1RU Named HamVention Amateur of the Year.** Richard L. Baldwin - W1RU, has been named 1992 Amateur of the Year by the Dayton HamVention Awards Committee. Baldwin has been president of the International Amateur Radio Union since retiring from the ARRL Headquarters staff in 1982.

Although Baldwin's 40-plus years as a "professional Amateur" have included a number of achievements, he probably is best remembered for his role in the 1979 World Administrative Radio Conference, where Amateurs were allocated new bands at 10, 18, and 24 MHz.

Baldwin is quick to say, however, that it was a group effort at the 1979 WARC that produced successes for Amateur Radio. "My selection for this honor comes primarily because I was one member of a succession of smoothly-functioning teams," he said. "We were successful," Baldwin said, "because we had a plan and because we convinced enough administrations of the value of the Amateur Service, and because we had an effective team not only prior to WARC-79 but at the conference itself."

Dick Baldwin, 72, was born in Pensacola, Florida, but lived most of his life in Connecticut before retiring to Maine in 1982. He was first licensed in 1934 as W1IKE and became W1RU in the 1960s. An active operator all his life (DXCC 310-plus), he used exclusively homebrew equipment until the mid-1960s. Today he is on all bands, including VHF packet, from his seaside home in Bremen, Maine, "which is too small to have its own post office."

Baldwin joined the Headquarters staff in 1948, and after four years there and another four in private industry (as an engineer for Motorola), he returned in 1956 to make the League his career. After advancing to managing editor of QST and then assistant general manager, he assumed the League's top staff position of general manager in 1975, succeeding John Huntoon - W1RW.

## Others Receive Honors.

Also honored by the HamVention were Gerald Cromer - K4NHN, for technical excellence, and Ned Raub - W1RAN of Waterford, Connecticut, for Special Achievement.

Raub received the 1992 Special Achievement Award for his humanitarian activities using Amateur Radio. More than 16 million readers were moved by Raub's March 1992 Reader's Digest account of how he helped Cambodian refugee Seth Keo - XU1SS cut through a tangle of bureaucratic red tape to obtain release from a resettlement camp on the Cambodian border.

"In a world where there are fewer and fewer opportunities to really be of help to people as individuals. Amateur Radio has enormous potential," Raub says. "The real tragedy is that we're able to reach so many (by Amateur Radio), yet able to get to know so few. But this was one example of how our hobby really can be a tool to help change lives if we want it to be."

Raub says that what motivated him to spend the time, energy and money necessary to help XU1SS was his growing sense of the unfairness of Keo's situation. Raub says that Keo, a Vietnam War veteran and later a member of the U.S.-backed Cambodian resistance movement, was abandoned by the very international agencies set up to help people like him.

Seth Keo and his brothers are now in the Seattle area attending a community college by day and working at night.

Raub reports that payment for the Reader's Digest article was donated to the family, and they used it to purchase a personal computer to aid their studies.

## Westlink Honors Young Amateur.

Angela Fischer - KB0HXY, has been named the Westlink Young Ham of the Year for 1992. Angela, 13, was first licensed at age 10 and holds a General Class license. She lives in suburban St. Louis and is the second

## ARRL Report - Continued

consecutive young Amateur from that city to receive the award; the 1991 winner was Richard "Sammy" Garrett - AA0CR. Angie received her award, which was underwritten by Yaesu U.S.A., at the Dayton Hamvention.

**Father Marshall Moran, 9N1MM, SK at 85.** Jesuit Father Marshall Moran - 9N1MM, died April 14, 1992, in New Delhi India after a brief illness. He was 85 years old and a legendary figure to DXers around the world. He was virtually the sole Amateur Radio contact with the Kingdom of Nepal for several generations of DXers.

Father Moran was born in Chicago on May 28, 1906. He attended St. Mel School, St. Ignatius College Preparatory School and Loyola University. He told of being interested in radio as a teen-ager in Chicago in the 1920s but was never licensed. It was not until being assigned to India that he requested, and was granted an Amateur license -- VU2ZX, in 1947, when he was 30 years old. He was in Nepal for nine years -- until 1960 -- before requesting an Amateur Radio license there. He became 9N1MM, the first official Nepalese licensee ever. Thirty years later he had worked 100,000 different people in more than 200 nations.

### Healers Hear Tale of Heroic Hams.

A group of medical and telecommunications specialists from around the world have a new view of Amateur Radio thanks to Len Traubman - W6HJK. On March 24, 1992, Traubman spoke to them during a conference in Boston entitled "Extended Clinical Consulting by Hospital Computer Networks," sponsored the New York Academy of Science.

Traubman's slide presentation and talk was based on an incident in the summer of 1990 (and reported in The ARRL Letter). Oleg Murugov - UA4FAY, was critically injured in an auto accident and lay comatose in a hospital 150 miles from Moscow. Traubman, a dentist, was one of several American Amateurs who, over a period of weeks, provided crucial medical information to the Russian doctors, as well as shipments of medical supplies not available to them.

The Boston conference was Traubman's first presentation of his slide show; he was invited to participate in the conference by its chairman,

Dr. Donald M. Parsons, whom Traubman had met on a computer BBS and who knew of the heroic efforts to save Murugov's life.

Traubman repeated his presentation on April 10 at the International DX Convention in Visalia, California.

**25-Year Recognition; Rebate on Publications Sales.** Thanks to a Board action in January, Affiliated Clubs will now be recognized for continuous affiliation beginning at 25 years and at 25-year intervals thereafter. Formerly, clubs were recognized for the 50-year mark only. Staff will be in contact with field officials to determine appropriate presentation venues.

The Board also granted a new perk to ARRL affiliated clubs which sponsor an ARRL-approved hamfest or convention. Clubs will be allowed a rebate of 10% of the total ARRL publication sales at such events, provided that: 1) No ARRL Headquarters staff are involved in manning the League booth for the purpose of selling publications; 2) The club shall reconcile the consignment with Headquarters prior to retaining any funds; and 3) National Conventions are excluded. For more information, contact the ARRL Publication Sales Department.

### NDMS Profile.

The National Disaster Medical Service (NDMS) has been established under the supervision of the Federal Emergency Management Agency to handle evacuation of medical patients from areas which have experienced a severe disaster. NDMS will only be activated if the local medical facilities are severely overloaded. Patients are evacuated to one of several cities in which hospitals have prior agreements with NDMS to handle such patients.

NDMS depends on several other groups, including Amateur Radio, to perform its function. This article is a brief summary of the efforts of several Amateur Radio operators in San Antonio to document the steps which must be performed in an evacuation and to provide a protocol for handling the necessary communications.

The major sites involved are the disaster area, the receiving sites, and the Air Force Coordinating Center at Scott Air Force Base in Illinois. Communications between the major

## ARRL Report - Continued

sites can be through normal commercial links or any radio link. Within the disaster area, all commercial communication links are expected to be overloaded and Amateur Radio operators will likely provide the necessary communications.

The receiving sites will need considerable communications between the receiving air fields and the receiving hospitals. Our local experience has shown that Amateur Radio provides more accurate and timely communications than the telephone system as operated by the untrained military personnel.

### Amateur Radio Participation.

Amateur radio operators will obviously be needed to relay necessary information between the various coordinating centers and hospitals at both the disaster and receiving area. The local study has produced documents which provide the necessary information for all of the known messages which are expected to be routinely passed. A significant effort was made to design the message forms so that they meet the needs. For instance, the only information necessary for hospitals prior to patient admittance are the number of patients for each category of injury. Patients names and addresses can be obtained after they are admitted to the hospital.

### Where Do We Go from Here?

In examining the conditions which will occur in any major disaster, it is obvious that the Amateur Radio community will be significantly involved. A standard protocol for all Amateurs who will be involved is still needed. Messages should be standardized and contain only that information which is pertinent.

There are several cities in which groups have developed good procedures for handling the NDMS activities. Contact your Section Manager for information on NDMS activity.

### Briefs.

o Space Shuttle Mission STS-50 is scheduled for launch Tuesday, June 9, with two new licensed Amateurs aboard. Commander Richard Richards and Mission Specialist Dr. Ellen Baker both awaited their call signs at presstime. The crew plans to operate SAREX's 20-meter voice, packet, slow-scan television and fast-scan TV (receive only).

o Kentucky has become the final state to exempt licensed Amateurs from its "scanner law." Kentucky Governor Brereton C. Jones signed H.B. 617 into law March 30, after companion bills passed both houses of the Kentucky legislature almost unanimously. Among those Amateurs at the forefront of this effort were Kentucky Section Manager Steve Morgan - WB4NHO; ARRL State Government Liaison Ron Landrum - KM4DX; and Dennis Thurman - KC4ZWT.

o The IARU North Korea project is on track, say its organizers (see April QST, p 18), and they are still hoping for a May start date. Three of the principal organizers of the project -- Dick Baldwin - W1RU, Marti Laine - OH2BH, and Kan Mizoguchi - JA1BK -- were at the Dayton Hamvention with the latest information. North Korea has been "pre-approved" for DXCC country status as soon as the first operation from there takes place.

o The FCC has extended to May 13, 1992 the deadline for filing comments on a notice of inquiry regarding RFI produced by industrial, scientific and medical equipment. The FCC said the extension was necessary because of the many questions raised in the notice, because of a need to have comprehensive input from the manufacturers of ISM equipment, and in response to a request for more time filed by the National Electrical Manufacturers Association. The deadline for filing reply comments was extended to June 15, 1992.

o Television station WANE TV in Ft. Wayne, Indiana, has won a national Headliner Award in the category of outstanding television documentary or editorial from the press club of Atlantic City. The film, "Last Voice from Kuwait," produced by WANE president and general manager Frank Moore - WA1URA, concerns Amateur Radio activity from Kuwait during its occupation by Iraq in 1990 and 1991. Headliner Award winners include major market newspapers and network broadcasters as well as small circulation periodicals and individual broadcasting stations, according to a WANE news release. The film's producer and writer was WANE News Anchor Joe Gregory. A story by the same name and on the same subject appeared in QST for May, 1991.

o The League's annual open house is scheduled for June 7 from 10 am to 4 pm.

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# DX DX DX

John Kanode, N4MM

## DX AWARDS

With so many DXers near or at the top of the DXCC Honor Roll, many are looking for new awards to work for. There are many other award programs than DXCC. CQ Magazine has a Worked All Zone program, Worked Prefix Awards program and a 2-Way CW and SSB DX Award Program. There is the IOTA program for working Islands of the World. There are many award programs sponsored by other Amateur Radio National Societies such as RSGB, DARC and JARL. How does one find out about these awards? There are several ways to get a lot of info on them. One way is in the ARRL Operating Manual. Chapter 8 has 56 pages of info and color photos of many awards. Also there is the K1BV Directory of DX Awards which displays 1729 certificates from 199 DXCC Countries. The ARRL Operating Manual can be ordered from ARRL or purchased at any Amateur Radio dealer who sells ARRL publications. The K1BV Directory can be ordered from Ted Melinosky - K1BV, PO Box 960, Keene, NH 03431-0960. The ARRL Operating Manual is \$15 and the K1BV Directory is \$17.

## DAYTON DX

For those who went to Dayton for DX activity, they had plenty to keep them busy. The DX Dinner, which was held at the Stouffer Center Plaza Hotel, had over 560 attendees. The menu was a DXers delight. The Guest speakers were Tom - K3TW who spoke on DXing in South Asia and Wayne - N7NG presented a slide show on the Albania Project. Door Prizes were drawn and I was lucky to win a 75 Meter dipole antenna kit.

QRZ DX and The DX Bulletin had booths at the Hamvention plus several of the people who sell DX logging programs had them operating so one could see how they operate. Tom Hogerty - KC1J along with several DXCC Field Reps were checking QSLs for DXCC Awards just inside the main entrance to the HARA Arena. The DX Forum ran from 9 a.m. to 1 p.m. and was moderated by Steve - N8BHQ and Mike - K8NW. The first presentation was the DX Advisory Committee with Ted - K8NA, John - N4MM and Tom - KC1J. The Albania Project was the next

presentation which was made by Chip - K7JA and Wayne - N7NG. Don - WA8MAZ gave a talk on "Effective QSLing". The South Sandwich 1992 DXpedition and the 1992 Yasme DXpedition slide show and talks were presented along with a presentation on Fernando de Noronha Island. Romeo - 3W3RR, XY0RR, etc gave a very brief talk with very few slides of his trip to Burma. Ed - NT2X acted as translator for Romeo. All in all, it was good DX forum and the crowd was STO at times. The Dayton Hamvention even had carpet installed in the room. I am sure it was done for noise abatement and not for the pleasure of your feet.

## UPCOMING DXPEDITIONS

June 7 Portugal Day Contest Phone  
June 20-21 ALL Asian DX Contest CW

## DX CONTESTS FOR JUNE

4J1FS M-V Island May 21 - June 16

## FATHER MORAN IS SILENT KEY.

Jesuit Father Marshall Moran, 9N1MM, died April 14 in New Delhi India after a brief illness. He was 85 years old and a legendary figure to DXers around the world. He was virtually the sole Amateur Radio contact with the Kingdom of Nepal for several generations of DXers. He had worked 100,000 different people in more than 200 nations. His ashes were returned to Nepal.

## TIDBITS

QSLs showing up in the mails are YA5MM, KP1, VK9XM and the 3B7 cards are very slowly coming out. Romeo - 3W3RR must have mailed thousands of cards for YA0, XY0 and 1S0 before he left for Dayton. Many reports have been noted to this fact. Lots of bootleg P5 been going on, mostly on 21 MHz. There will be an official announcement before any valid operation takes place. IY0GA, a new Marconi station has been operating from Cape Figari. In 1932, Marconi tested a microwave link between the Cape Figari lighthouse and Rocca da Papa in Rome.

[Editor's Note: We apologize for leaving off the name of the handsome man at the right of the picture in the May column. Of course you all recognized him as John Kanode - N4MM.]

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# Public Service Report

Hank Black - N3ESR

(301) 340-8595

Material for the PUBLIC SERVICE REPORT can be left to N3ESR on the WA3ZNW packet bulletin board on 145.090 MHz, called by telephone, or mailed electronically by modem on arrangements, or mailed to Public Service Report, 105 North Van Buren St., Rockville, MD 20850-1860. Deadline for receipt of material is the third of the month.

Deadline for receipt of material is the third of the month.

## AMATEUR RADIO TAKES A WALK ON THE C&O CANAL

Sixteen hams provided emergency and medical communications for the National Multiple Sclerosis Society Super Cities Walk along the Chesapeake and Potomac Canal on Sunday, April 5th. These hams manned critical stops along the walk which covered 20 miles from the Pentagon Parking Lot in Arlington, Virginia, across Key Bridge in the District of Columbia, to Avenel in Potomac, Maryland.

While each walker started at either the Pentagon Parking Lot or Avenel, a walker would end up 10 miles later at Glen Echo Park and would be bussed back to the respective starting point. For some the walk provided blisters, sore muscles and the like. No medical emergencies were encountered at any of the 12 stopping points on the Walk as the weather was on the cool side.

However, there were a few tense moments as a private medical ambulance at Glen Echo departed to investigate reports of an overturned vehicle near Little Falls on the Clara Barton Parkway. Montgomery County emergency units were also in route. Fortunately, services of the Amateur operators were not required.

Thanks to the Amateur Radio operators from the District of Columbia, Maryland and Virginia who assisted in providing a public service to the MS Society. They were: WA5QOC, KA4ATI, N3EPY, N4BYF, N3LGA, N3JFW, WA3TGH, N3LGI, N3JEY, KA3USB, W3WON, KE3AG, WA3WHT, N3LFV, WA2GIN & N3ESR. A special note of thanks to KI4MB, sponsor of the 145.47 MHz repeater, who graciously allowed use of the repeater in the two-frequency net operations for the public service event.

## FLINTSTONE BALLOON NOT SAVABLE IN CHERRY BLOSSOM PARADE

Over 100,000 spectators and participants lined up along Constitution Avenue for the Annual Cherry Blossom Parade on Saturday April 11th. Twenty-two Amateur Radio operators arrived at 8 a.m. for a short meeting and to receive their assignments.

Although nothing major happened during the parade, four lost parents were reunited with their children. And, Amateur Radio did attempt to save the day when Fred Flintstone, the balloon, had a burst seam. The hams were able to locate his owner in an attempt to repair the rapidly deflating attraction. But alas, it was not to be as it was overheard on the net that Freddy was truly dead.

We would like to thank the Voice of America Amateur Radio Club for providing the location for net control. Also, thanks to the Department of State Amateur Radio Club for the use of its repeater during the parade.

Thanks go out to the following Amateurs for their service at the parade: WW3B, KD4CCT, KB4CEV, KC4EFJ, KK4GB, N4HCP, K2HJ, KI4HK, AB4HO, W3HXF, KC4IGS, W3OXY, KC4RON, N4SCK, K3UAL, N4URL, KB4VLP, KC4WES, WB4WZZ, and KC4YMS. We would also like to thank N3IWM and N3JIQ who were down to watch the parade found our net and volunteered to help out.

-Submitted by David Drysdale - N3JGL, District of Columbia EC

## Public Service Report - Continued

### MONTGOMERY AMATEURS HONE OPERATING SKILLS DURING PARADE

On Sunday, May 3rd, 100 units participated in the Annual Bethesda-Chevy Chase Day Parade with the help of 11 hams. Amateur Radio provided communications in coordinating the staging of parade units, from the Armed Forces Color Guard to the Wheaton American Legion Guard and all alphabetically in between.

Units of all kinds, including helium filled balloons, marched down the parade route starting at the National Institutes of Health on Wisconsin Avenue down Woodmont Avenue in downtown Bethesda to the Metro Center at East-West Highway and Old Georgetown Road. The Bethesda-Chevy Chase Squadron of the Civil Air Patrol marshalled units in the staging area.

Communications between CAP personnel and their communications network and parade officials at various locations on the parade route were provided by radio operators from various Amateur clubs and the Radio Amateur Civil Emergency Service in Montgomery County. Amateurs helping out were N3HQX, WA3HNN, NW3S, N3JEY, N3CLL, WA3WHT, KE3AG, AD3F, N3BRM, K3USO & N3ESR.

### PUBLIC SERVICE CALENDAR

- |        |   |
|--------|---|
| May 30 | National Capital ARES Council Meeting<br>(Location yet to be determined)<br>Contact Henry Black - N3ESR (301) 340-8595 or<br>David Drysdale - N3JGL, (202) 291-3838 |
| Aug 1  | Winchester Junior Trialathon<br>Winchester, Virginia<br>Contact Walt Johnson - WA4HVU (703) 667-1474  |
| Aug 2  | Winchester Trialathon<br>Winchester, Virginia<br>Contact Walt Johnson - WA4HVU (703) 667-1474   |

### Foundation Meetings

The Foundation for Amateur Radio, Inc. meets at 8:00 p.m. on the second Wednesday of each month.

Visitors are always welcome

Phone (301) 725-5822 for information

The next meeting will be held on June 10 at the Forecast Office of the National Weather Service in Sterling, Virginia. Attendees will have a chance to see the new SKYWARN station (funded by the Foundation) and the NWS Forecast Office - including the new doppler radar.

From the 495 Beltway, take the Dulles toll road West. Go all the way to Exit #1 (Rt. 28). At the traffic light after the toll booth, turn right (going North). At the second traffic light turn left onto Rt. 606 and go 3½ miles. Look for white Weather Service sign on left. Go thru the gate and head for the large white radar dome and Weather Service building. Park under the radar tower. Talk-in will be available on 146.91. Car pools would be desirable. The meeting will convene at the regular 8:00 p.m. For additional information contact Dan Gropper - KC4OCG (703) 281-2358.



## SKYWARN

# SKYWARN ACTIVATED FOR FLOODING

On April 21, 1992, the National Weather Service (NWS) activated SKYWARN for flash and river flooding. The storm dumped many inches of rain and caused widespread flooding. In Page County alone flooding closed over 50% of the roads. The Rockingham, Augusta, and Page County ARES groups were activated and ran a net on 146.625 for the southern Shenandoah Valley. This net was monitored from the SKYWARN Amateur Radio station in the Washington Forecast Office. The main SKYWARN net covering the northern Shenandoah Valley, the eastern panhandle of West Virginia and Western Maryland was active on 147.300 WA4TSC Bluemont repeater. The packet link through 4KNODE and 4KMAIL was very effective in relaying watches and warnings to the southern Shenandoah Valley and in receiving storm damage reports from that area. The packet net took place on 145.73. The net ran from approximately 6:00 p.m. until 1:00 a.m. on April 22. The NWS thanked the Amateurs for a job well done and the information proved extremely timely and useful to the forecasters.



### 4KNODE and 4KMAIL QSY!

4KNODE and 4KMAIL have changed frequency from 145.55 to 145.73 to avoid possible conflict with Amateur / satellite contacts. The RARES node has also moved to 145.73 to insure reliable packet communications in the Shenandoah Valley. We would like to establish similar packet links for use during severe weather to eastern and southeastern Maryland and the District of Columbia on this frequency. If you can help with this project, please contact Dan - KC4OCG.

### EQUIPMENT AND SKILLS DONATED TO SKYWARN PROGRAM

We would like to thank the Amateur Radio Research and Development Corporation (AMRAD) for donating the major components for an upgraded computer to be used at the Washington NWS for packet operations. The 386 based computer has a 20 MEG hard drive and will be a big improvement over the floppy based Heath/Zenith presently in use. A mother board was donated by Jan - K2HJ. Assistance in configuring and installing the new computer has been generously provided by John - KN4LI, Mike - KD4ITK, Metropolitan Technical Services of Chantilly, VA and Bob - KB4PDP. We would also like to thank AMSAT for donating a monitor.

### CREATION OF SKYWARN EMERGENCY CALL LIST

We are in the process of creating an emergency telephone call list of at least 10 SKYWARN-trained Amateur Radio operators in each of the 46 counties (including DC) in the Washington NWS's primary Watch-and-Warning area. This list is to be used when severe weather is anticipated to hit a county and we have not been able to contact Amateurs in that county by Amateur Radio. If called, the Amateur will be asked to give a severe weather report and also to monitor the net frequency for the duration of the weather event. If anyone is interested in being on the call list please contact your county Emergency Coordinator or Dan - KC4OCG.

### NET CONTROLLER TRAINING SESSION

We are in the process of gearing up to run training sessions for net controllers for the Amateur Radio Station at the Washington Forecast Office in Sterling, VA. We would like to train approximately 100 net controllers so that the station can be staffed for many days if necessary. Anyone interested in being trained as a net controller is invited to contact Dan Gropper at (703) 281-7458 to arrange for training.

Dan - KC4OCG

# Training Classes

Robert Armstrong, WA4SQL

44 South French Street, Alexandria, VA 22304

Phone (703) 751-2294

**Novice and Technician Training Classes, Herndon, VA. Starting September 12, 1992.**  
Sponsored by the Herndon Repeater Group. Classes are free but will be limited to 35 people.  
For information Contact Mike Weber - WB8RDN at (703) 450-2304 between 7:00 and 9:00 p.m.

**Novice Training Classes, Towson, MD.** Sponsored by BRATS. Classes are being held on an On-going basis every Tuesday evening at the Towson Armory. Classes are free; Materials (which you can keep) consist of a book and tape and cost \$19.90. For registration or information, contact Joe Chidester - W3SHZ (410) 602-0353

**Novice Training Classes, N.W. Washington, DC.** Sponsored by MADRAS. For more information contact Larry Ziecheck - N3GKZ (301) 984-6112.

**VIRGINIA TRAFFIC TRAINING NET** - 3685 kHz 6:30 p.m. daily. 5 - 8 wpm.

**SLOW CODE PRACTICE NET**, 28.250 MHz 7:00 to 8:00 p.m. Wednesdays. Sponsored by Woodbridge Wireless, Inc.

*Please keep Auto-Call advised of Training Classes*

## GENERAL INFORMATION

Alexandria Radio Club

Anne Arundel

Arlington ARC

Baltimore ARC

BRATS

Chaverim, Inc.

Fauquier ARC

Frederick ARC

Herndon Repeater Group

Laurel ARC

MADRAS

Maryland Mobileers

Montgomery ARC

Mount Vernon ARC

NASA/Goddard ARC

Ole Virginia Hams

Pentagon ARC

Rock Creek ARA

St. Mary's County ARA

Shenandoah Valley ARC

Southern Maryland ARC

Southern Patuxent ARC

Stafford Adult Education

Sterling Park

Tri County ARC

Vienna Wireless

Woodbridge Wireless

John Forrest - WZ4A (703) 971-2905

Tony Young - WA3YLO (301) 262-1917

Fred Bardsley - WD4DHW (703) 533-0372

Phone 1-800-HAM FEST - VB

Joe Chidester - W3SHZ (410) 602-0353

Bob Teitel - W3IDT (301) 654-3484

Bill Mills - KC5PF (703) 937-4090 (H), 818-3955 (O)

Steve Bauman - W3FOA (301) 662-4552

Michael Weber - WB8RDN (703) 450-2304

Pud Reaver - W3DQI (301) 498-6293

Larry Ziecheck - N3GKZ (301) 984-6112

John Baugus (301) 551-3161

Ken Nichols - KD3VK (301) 977-5405

John Forrest - WZ4A (703) 971-3905

Vikki Gigante - KA3PVS (301) 249-2609

John Fritsch - N4YOB (703) 791-5995

David Boyd - K9MX (703) 756-1817

Walt Ramsey - AK3B (301) 949-3954

Call (301) 862-2214

Guy Black - W4PSJ (703) 722-4952

Vic Curtis - WA3YUV (301) 888-1388

Dwayne Kincaid - WD8OYG (301) 586-2177

Jerry Mullinix - AC4HK (703) 659-3905

Mark Johnson - WS3N (703) 430-3804

Al Sines - WA3QGA, Box 710, College Park 20740

Paul Wilkins - AB4CY (703) 560-2779

Loyd Davis - K8EI (703) 360-0248

**FOUNDATION FOR AMATEUR RADIO**  
**Volunteer Examiner Cooperative**

Nancy Draheim - NK4U

3513 Old Post Road, Fairfax, VA 22030  
(703) 691-0078

**SCHEDULE OF EXAMINATIONS**

**NOTICE:** If you presently have a Technician class license which was acquired prior to March 21 1987, keep a copy of this license available when you decide to upgrade to General class. It will be your responsibility to prove you are grandfathered for Element 3B (General Theory).

- May 24 Maryland FM Association Hamfest (Howard County Fairgrounds) Pre-registration  
Contact: Les McClure, W3GXT (410) 833-8667
- Jun 6 Virginia Beach ARC (Virginia Beach, VA) (ARRL VEC)  
Contact: Ed Robison, WD4GOY (804) 468-0866
- Rappanannock ARA (Saluda, VA) (ARRL VEC)  
Contact: Fay Smith (804) 776-9289
- Jun 13 Anne Arundel Radio Club (Davidsonville, MD) (LARC VEC) Walk-in  
Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083
- Mount Vernon ARC (Alexandria, VA) (Laurel VEC) Walk-in  
Contact: Frank Mackey, N4GUS (703) 455-1510
- Massanutten ARA (Harrisonburg, VA) (ARRL VEC) Walk-in  
Contact: Marshal Cooper, N4ZKH (703) 856-8012 (6-9 p.m.)14
- Ole Virginia Hams ARC (Manassas, VA) (ARRL VEC) Walk-in  
Contact: Harry Vorhauer, W4PVA (703) 368-6050
- Richmond, VA (W5YI VEC) Pre-registration required  
Contact: Dow Pierce (804) 232-8128
- Jun 18 Baltimore ARC (Towson, MD) (ARRL VEC) Walk-in  
Contact: Robert Kennick (410) 426-8255
- Jun 20 Laurel ARC (Laurel, MD) (Laurel VEC) Pre-registration desirable  
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- Jun 22 Southern Maryland ARC (Temple Hills, MD) (Laurel VEC)  
Contact: Ray Simpson, WI3A (301) 894-0606
- Jun 24 Maryland Mobileers ARC (Glen Burnie, MD) (Laurel VEC) Pre-registration  
Contact: Jerry Gavin, NU3D (410) 761-1423
- Jul 11 Anne Arundel Radio Club (Davidsonville, MD) (Laurel VEC) Walk-in  
Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083
- Chesapeake DX Assn. (Chesapeake, VA) (ARRL VEC)  
Contact: Bill Verebely, KC4YX (804) 424-4764

## Volunteer Examiner Cooperative - Continued

- Jul 18** Laurel ARC (Laurel, MD) (Laurel VEC) Pre-registration desirable  
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- George Washington U/Department of State (Washington, DC) (ARRL VEC Limited Walk-in  
Contact: Derrill Rohlfs, W3WOX (301) 423-0179
- Jul 28** Maryland Mobileers ARC (Annapolis, MD) (Laurel VEC) Pre-registration  
Contact: John Kohl, KO4A (410) 757-8148
- Aug 1** Hampton Roads Radio Assn. (Hampton, VA) (W5YI VEC)  
Contact: Bill Runyon, N4BDH (804) 487-8611
- Middletown VE Team (Middletown, VA) (ARRL VEC) Limited walk-ins  
Contact: Walt Quitter, NC4B (703) 869-5241
- Aug 8** Anne Arundel Radio Club (Davidsonville, MD) (Laurel VEC) Walk-in  
Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083
- Massanutten ARA (Harrisonburg, VA) (ARRL VEC) Walk-in  
Contact: Marshal Cooper, N4ZKH (703) 856-8012 (6-9 p.m.)
- Richmond, VA (W5YI VEC) Pre-registration required  
Contact: Dow Pierce (804) 232-8128
- Aug 15** Laurel ARC (Laurel, MD) (Laurel VEC) Pre-registration desirable  
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- Aug 20** Baltimore ARC (Towson, MD) (ARRL VEC Walk-in  
Contact: Roberrt Kennick (410) 426-8255
- Aug 26** Maryland Mobileers ARC (Glen Burnie, MD) (Laurel VEC) Pre-registration  
Contact: Jerry Gavin, NU3D (410) 761-1423
- Sep 12** Anne Arundel Radio Club (Davidsonville, MD) (LARC VEC) Walk-in  
Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083
- Sep 19** Laurel ARC (Laurel, MD) (Laurel VEC) Pre-registration desirable  
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- Sep 20** ARRL Roanoke Division Convention (Virginia Beach, VA) (ARRL VEC)  
Contact: Ed Brummer, W4RTZ (804) 898-8031

If you presently have a Technician class license which was acquired prior to March 21 1987, keep a copy of this license available when you decide to upgrade to General class. It will be your responsibility to prove you are grandfathered for Element 3B (General Theory).

NOTE: All examinations require that you submit:  
Copy of your current Amateur Radio license (bring original)  
Completed FCC Form 610.  
Check for appropriate examination fee.  
Fees of individual VEC may vary.  
ARRL VEC Exam fee is \$5.40  
W5YI VEC Exam fee is \$5.40  
Laurel VEC Exams, all tests are free.  
Mountain VEC Exams, all tests are free

This schedule of examinations appears each month in Auto-Call Magazine  
Sponsored by the Foundation for Amateur Radio

# SRAM - 042

## (Soviet Radio Amateur Movement)

Edited by Dexter Anderson, W4KM

[Summary translation from RADIO #10/1991 (October 1991). Text in square brackets is by translator.  
Note that some of the terms used, including USSR, Soviet, and DOSAAF, have become obsolete.]

### "THROUGH THE AIRWAVES BLOCKADE" ["SKVOZ' EFIRNUYU BLOKADU"]

by Arnol'd Yakovlevich Grif, Special Correspondent, RADIO magazine

R3A and R3B were amateur stations set up in the House of Soviets of the RSFSR [the Russian "White House"] just hours after the beginning of the putsch [on 19 August 1991]. They became just about the only over-the-air communication channels of information for the Russian Government. While Muscovites were building barricades around the White House under the threat of tank attacks, the R3A and R3B operators were installing antennas on the roof of the White House under the sights of snipers ensconced in the upper floors of nearby buildings. Without a break and through jamming, the amateur radio operators read out -- on the amateur bands, then later on medium wave -- Decrees just signed by Russian President Yel'tsin and appeals and decisions of the Government. This information was relayed by amateurs, and appeared in democratic newspapers and leaflets.

The information blockade, conceived of by the conspirators to stifle glasnost', democracy, and freedom, didn't succeed. And radioamateurs -- our colleagues, over-the-air friends, and readers -- had a lot to do with this.

They had no trouble choosing which side of the barricades to stand on. Men of action, they had grown used to dealing with most difficult situations with deeds, not words. It's no accident that many belong to the noble corps of radioamateur rescue workers who operated over the air or on site following the Armenian earthquake and other disasters. On 19 August, when their own White House was being attacked, they went without hesitation to the House of Soviets of the RSFSR. Together with thousands of Muscovites, they helped build barricades. They became radio operators later, when they learned that the putschists had put "Radio of Russia" and "Echo of Moscow" off the air and were attempting, through false propaganda and an information blockade, to isolate the Russian President from his country and people.

At great risk, Moscow amateurs brought their equipment to the White House and, on the night of 19 - 20 August, while the putschists were preparing to storm the Russian Parliament, they went on the air.

R3A was operated on the 6th floor on shortwave and ultrashortwave by a group consisting of Andrey Gromov, R3A/UA6XGL; Dmitriy Gus'kov, UV3DCX; Vladimir Kazakov, UA1ZCU; Aleksandr Panormov, RW3DP; Yuriy Promokhov, UV3ACQ; Anton Rebezov, UA6YHP; Petr Strezev, UA3AOC; Andrey Chernyyayev, UA9-163-075; Yevgeniy Shablygin, RA3AA; Valeriy Papkov, UA3ANL; Andrey Novoselov, RW3AO.

R3B was operated on the 11th floor by a group consisting of Adrian Sergaziyev, UA3AMX; Boris Yurkov, UA3AMC; Sergey Mazunin, RA3AMM; Aleksey Bezrukov, RA3AB; Yuriy Zak, RA3ATM. This group came into the White House from the barricades in response to a call for radio specialists over the loudspeaker system; due to its efforts, an MF transmitter was installed and operated on the frequency of the broadcasting station "Radio of Russia."

Leafing through the pages of the R3A log, Andrey Gromov, R3A/UA6XGL, remarked that the first entry was at 0245 MSK on 20 August. R3A went on the air on 3.640 MHz. It transmitted an "Appeal to the citizens of Russia!" and Decrees of the President. A later log entry read that at 0450 jamming began.

## SRAM -042 - Continued

At that time, as recalled by the R3A operators, a storming of the White House was expected at any minute. Everyone was preparing to resist.

The R3A operators waged a genuine radio struggle against the "electronic warfare" specialists, changing bands, tuning away from powerful jammers, and continuing with their transmissions.

"At the beginning," adds Aleksandr Panormov, RW3DP, "we advised shortwavers of backup frequencies to which we would transfer if we were jammed. But we soon realized that by doing this we were making things easier for our radio opponent. Then we got clever. We changed to amateur slang. For example, we advised: 'We're moving to 10 away from the c.w. edge in the DX portion.' Shortwavers understood this, but the military radio operators lost us and spent a long time rummaging around the airwaves..."

Let's recall that a state of emergency had been declared in the capital, a curfew had been declared, and Decision No. 1 of the State Committee on the State of Emergency called for action to "Decisively cut off the spreading of rumors or actions inciting the population to violate law and order..." In these circumstances, the young UZ3AXJ operators displayed genuine courage. Using FAX and electronic mail, they relayed everything they received from the White House. They also kept watch for three days and nights, monitoring and guiding the radiostation of the Parliament of Russia to frequencies that were free of interference.

"Along with transmitting government documents," explained Dmitriy Gus'kov, UV3DCX, "we ... collected, via Moscow radio amateurs, information on troop movements, which we immediately passed on to the Defense Staff. ... ."

"We also were helped a lot by an ultrashortwave net on 145.600 MHz," adds Petr Strezev, UA3AOC, who came to the White House the morning of the 19th. "Many Moscow ultrashortwavers operated there." Petr omitted the fact that it was he who set up this net. The most active operators contacted by Strezev were Aleksandr Fetisov, UA3AMB, and Vasiliy Zaushitsin, RW3DR. Vasiliy, who lives outside the city in the Nemchinovka area, informed the White House regularly if tanks were moving toward Moscow on the highway.

Adrian Sergaziyev, UA3AMX, Sergey Mazunin, RA3AMM, and Aleksey Bezrukov, RA3AB, used circuits from a regular TV set and assembled an MF transmitter in one night. They urgently modified a transceiver from SSB to AM and to 1.5 MHz. The resulting transmitter went on the air at noon on 20 August.

At the end of the ordeal, the following radiogram was sent in the name of the parliament radio operators from the White House in Moscow:

"Dear Colleagues!

"We are happy that at the moment we were put to the test, our fraternity was able to take its place in the ranks of the defenders of freedom and democracy... Sycophants of the bandit junta cut off broadcasting by the free radio and television stations. Lies and slander filled the airwaves.

"Radioamateurs came to the rescue. All of us -- those who were in the surrounded parliament of Russia, and those who reported on the location of military equipment and received and relayed our reports -- were united in our efforts to help the Motherland.

"Our low-powered transmitters were able to pierce the wall of interference created by professionals from the special [intelligence] services. After all, the amateur radio stations were operated by people struggling for freedom, and such people can't be beaten, either on the barricades or on the air.

"We constantly felt the support of friends throughout the world. Thanks to all of you! We held out together..."

"Moscow, Parliament of Russia, 22 August 1991."

# **T-MARC**

## **The Middle Atlantic FM and Repeater Council**

### **Maps of Coordination Areas And Listing by Output Frequency**

As of December 1991

T-MARC voluntarily coordinates frequencies used by repeaters, "remote base" stations, and related activities in Delaware, Maryland, the District of Columbia, the northern one-third of Virginia, and the eastern panhandle of West Virginia.

These maps and listings show ONLY "open" or limited usage repeaters. "Closed" repeaters, "remote base" stations, control and link frequencies, and other "closed" systems which are also coordinated by T-MARC, and uncoordinated repeaters, are not shown here. Therefore, these maps and listings should not be used for coordination purposes.

Listing of Output Frequencies is provided only for the 2-meter repeaters at this time. Listings for other bands will be provided in future issues of Auto-Call as space is available. Pull out the booklet from the center-fold and save it for reference.

Inquiries relating to the coordinating of frequencies within this area, as well as additions and corrections, should be addressed to:

**T-MARC Coordinating Committee  
1419 Larch Road  
Severn, MD 21144.**

For a copy of the current T-MARC repeater directory, please send a self-addressed stamped envelope (SASE) to the above address.

The following repeater frequency pairs have been set aside for testing and development of new repeaters and for the operation of temporary, portable, or emergency repeaters on a non-interference basis to coordinated repeaters: 144.57-in/145.17-out, 223.00-in/224.60-out, 442.875-in/447.875 out, 447.900-in/442.900-out, 908.00-in/920.00-out, and 1271.00-in/1283.00-out. No permanent repeaters will be coordinated on these frequencies, and coded access may be required to minimize co-channel interference.

T-MARC cooperates with DMARC, the Digital Mid-Atlantic Radio Council, on packet radio and related matters. Packet radio frequency usage and similar matters should be addressed to:

**George H. Stickler, KA3DXX  
Secretary, Digital Mid-Atlantic Radio Council  
8249 Quarterfield Road  
Severn, Maryland 21144**

**KA3DXX@KA3DXX.MD.USA.NOAM  
ka3dxx@ka3dxx.ampr.org [44.60.224.1]  
DATA Line: (410) 551-6517 (300/1200/2400 bps)  
VOICE Line: (410) 551-7657**

# T-MARC

## Coordination Area Maps

144-148 MHz Repeaters -- By Output Frequency  
 T-MARC Coordination Area -- Data as of December 1991

NOTE: Not to be used for coordination.

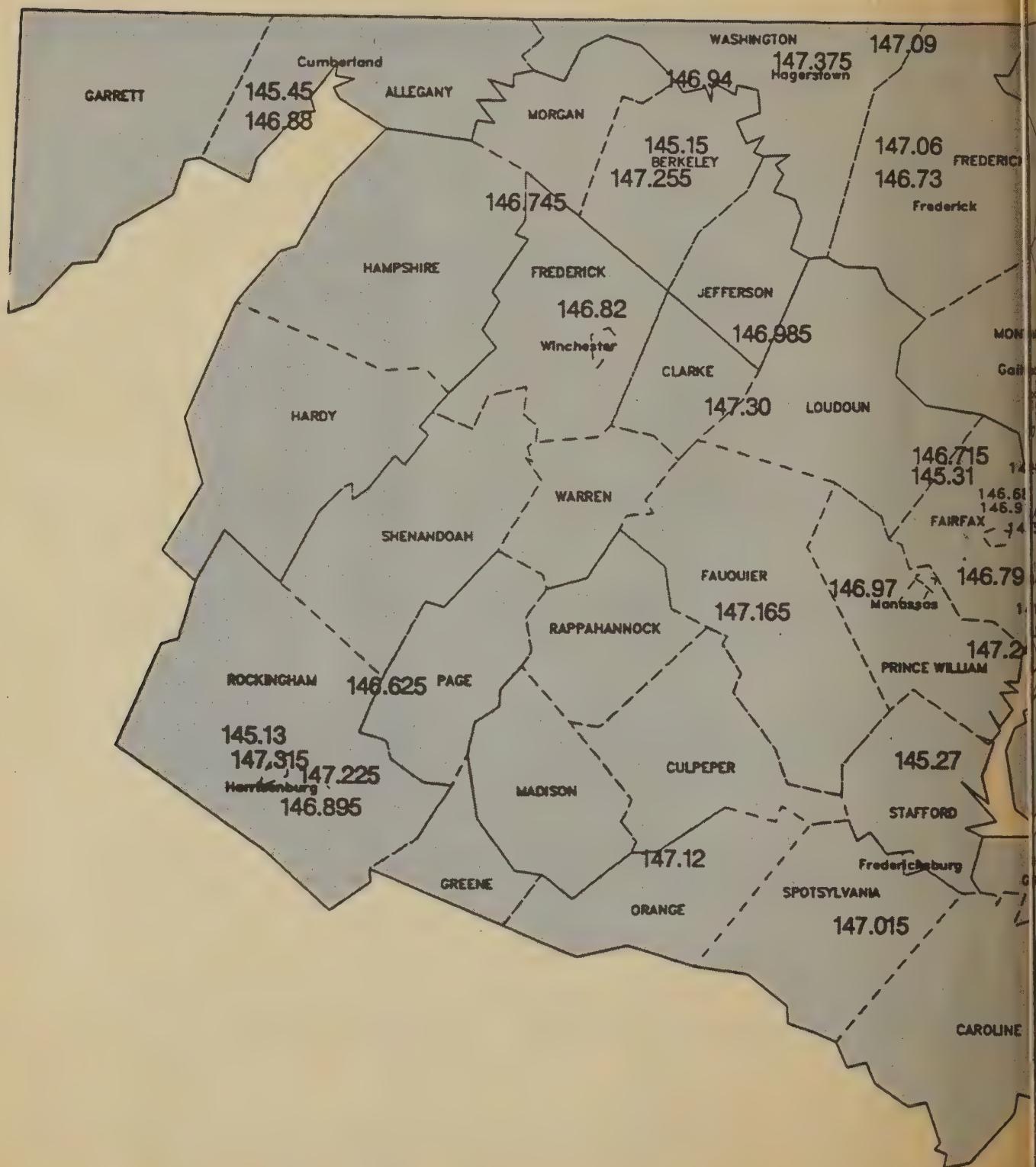
Features: a=autopatch (ca)=closed autopatch e=emerg pwr l=link and/or crossband o=open access r=RACES affil.  
 (Wx)=weather net x=wide area coverage y=RTTY/ASCII z=direct access to police

Output	Input	State City	Coverage	Call	Features
144.93	923.25	MD Annapolis	ANNAPOLIS	WB4APR	oATV Audio 1
144.93	1289.25	MD Annapolis	ANNAPOLIS	WB4APR	oATV Audio 1
144.97	430.75	VA Alexandria	WASHINGTON AREA	WA9GVK	oATV Audio 1
144.99	430.75	MD BALTIMORE	BALTIMORE	W3WCQ	oATV Audio 1
145.11	144.51	DC Washington	WASHINGTON AREA	W3EIL	o(ca)eyz
145.13	144.53	MD NW Baltimore	BALTIMORE	WA3DZZ	ol(ca)z
145.13	144.53	VA Harrisonburg	NORTH CENTRAL	N4YET	o
145.15	144.55	VA Arlington	WASHINGTON AREA	WB4MJF	oCTCSS
145.15	144.55	WV Martinsburg	EAST	WA8FSE	oe
145.17	144.57	DE ALL	ALL	Rptr.	Test Pair
145.17	144.57	MD ALL	ALL	Rptr.	Test Pair
145.17	144.57	MD Waldorf	SOUTH	KA3TQD	c(ca)exCTCSS-156.7
145.17	144.57	VA ALL	T-MARC AREA	Rptr.	Test Pair
145.17	144.57	VA Lorton	WASHINGTON AREA	KE4ZN	oCTCSS Test Pr.
145.17	144.57	WV ALL	T-MARC AREA	Rptr.	Test Pair
145.19	144.59	DC Washington	WASHINGTON AREA	W3DOS	o
145.21	144.61	DE Seaford	SOUTH	KV3D	oa
145.23	144.63	MD New Carrolltn	WASHINGTON AREA	N3EZD	oCTCSS-110.9
145.25	144.65	MD Elkton	NORTHEAST	K3NCL	oCTCSS156.7
145.25	144.65	MD Rockville	WASHINGTON AREA	W3RCN	oe
145.27	144.67	VA Stafford	FREDERICKSBURG	N4SMP	o(ca)
145.29	144.69	MD Bethesda	WASHINGTON AREA	K3YGG	oel
145.31	144.71	VA Herndon	WASHINGTON AREA	N4FXP	o(ca)e
145.33	144.73	MD Shawsville	NORTHEAST	K3HT	o
145.35	144.75	MD Stevensville	DELMARVA PENINSULA	K3UBC	oel
145.35	144.75	VA Falls Church	WASHINGTON AREA	W4AQD	c
145.37	144.77	MD Adelphi	WASHINGTON AREA	WB3FRW	oae-*537
145.39	144.79	MD Hughesville	SOUTH	N7BW	o
145.41	144.81	MD Westminster	NORTH CENTRAL	K3PZN	oelr
145.45	144.85	MD Cumberland	CUMBERLAND	K3MWI	o(ca)l
145.45	144.85	MD Rockville	WASHINGTON AREA	KC3NG	o(ca)
145.47	144.87	VA Arlington	WASHINGTON AREA	WB4MJF	o
145.49	144.89	MD College Park	WASHINGTON AREA	W3EAX	o(ca)z-*911
146.61	146.01	MD Cheverly	WASHINGTON AREA	K5VCG	o(ca)
146.625	146.025	MD Princess Anne	DELMARVA PENINSULA	KA3MRX	oaeryz
146.625	146.025	VA New Market	NORTH CENTRAL	KE4FM	oe
146.64	146.04	MD Lexington Pk	SOUTH	K3HKB	oaez
146.655	146.055	VA Alexandria	WASHINGTON AREA	WD4PDP	oa
146.67	146.07	MD Baltimore	BALTIMORE	W3FT	o(ca)el
146.685	146.085	VA Vienna	WASHINGTON AREA	K4HTA	oe
146.70	146.10	DE Newark	WILMINGTON	WA3QPX	o
146.715	146.115	VA Sterling	WASHINGTON AREA	WA4TXE	o(ca)e
146.73	146.13	DE Wilmington	WILMINGTON	WA3QPX	oe
146.73	146.13	MD Catoctin Mtn	FREDERICK	W3SOG	o
146.745	146.145	WV Berkeley Spgs	EAST	KK3L	oerx
146.76	146.16	MD Jessup	BALTIMORE	WA3DZD	olx
146.76	223.16	MD Jessup	BALTIMORE	WA3DZD	ol
146.76	449.00	MD Jessup	BALTIMORE	WA3DZD	ol
146.76	146.16	MD Jessup	WASHINGTON AREA	WA3DZD	olx
146.76	223.16	MD Jessup	WASHINGTON AREA	WA3DZD	ol

## 144-148 MHz Repeaters -- By Output Frequency

Output	Input	State	City	Coverage	Call	Features
146.76	449.00	MD	Jessup	WASHINGTON AREA	WA3DZD	ol
146.775	146.175	MD	Bel Air	NORTHEAST	WA3PFT	or
146.79	146.19	VA	Fairfax	WASHINGTON AREA	W4LBL	o(ca)elrz
146.79	222.50	VA	Fairfax	WASHINGTON AREA	W4LBL	o(ca)elrz
146.805	146.205	MD	Millersville	ANNAPOLIS	WA3PJQ	o(ca)erz-911
146.82	146.22	MD	Salisbury	DELMARVA PENINSULA	WA3ROW	oCTCSS-156.7
146.82	146.22	VA	Winchester	WINCHESTER	W4RKC	o
146.835	146.235	MD	Greenbelt	WASHINGTON AREA	W3ZM	oe
146.85	146.25	MD	Havre de Grac	NORTHEAST	N3EIO	o
146.865	146.265	MD	Tyaskin	DELMARVA PENINSULA	N3HQJ	o(ca)lCTCSS-156.7
146.88	146.28	MD	Cumberland	CUMBERLAND	WA3WSW	o(ca)e(Wx)z-*911
146.88	146.28	MD	Greenbelt	WASHINGTON AREA	K3GXF	o
146.895	146.295	MD	Lutherville	BALTIMORE	KB3LA	oe
146.895	146.295	VA	Harrisonburg	NORTH CENTRAL	N4RAG	o
146.91	146.31	VA	Tysons Corner	WASHINGTON AREA	W4XG	o(ca)
146.925	146.32	DE	Delmar	SOUTH	K3NOQ	oerz
146.925	146.325	MD	Salisbury	DELMARVA PENINSULA	K3NOQ	oerz
146.94	146.34	MD	Hagerstown	HAGERSTOWN	W3CWC	oar
146.955	146.355	DE	Newark	WILMINGTON	WB3JTK	oaez
146.955	146.355	MD	Rockville	WASHINGTON AREA	KC3K	o
146.97	146.37	DE	Dover	DOVER	W3HZW	o
146.97	146.37	VA	Manassas	WASHINGTON AREA	WA4FPM	o(ca)elz-*911
146.985	146.385	MD	Sunderland	SOUTH	W3ZNW	o
146.985	146.385	WV	Charles Town	EAST	N8EIV	oCTCSS-night
147.00	146.40	MD	Ashton	WASHINGTON AREA	K3WX	o(ca)ex
147.015	147.615	MD	Ocean City	DELMARVA PENINSULA	KA3BAF	o(ca)lCTCSS-156.7
147.015	147.615	VA	Fredericksbрг	FREDERICKSBURG	WB4LNT	o
147.03	147.63	MD	Baltimore	BALTIMORE	W3DID	o(ca)elz
147.045	147.645	MD	Easton	DELMARVA PENINSULA	WA3GVI	o
147.045	147.645	VA	Arlington	WASHINGTON AREA	WA4YVM	oe
147.06	147.66	MD	Frederick	FREDERICK	KA3NLF	o
147.075	147.675	DE	Millsboro	SOUTH	K3JL	oae
147.075	147.675	MD	Millersville	BALTIMORE	W3VPR	o
147.09	147.69	MD	Hagerstown	HAGERSTOWN	K3UMV	oer
147.105	147.705	MD	Davidsonville	ANNAPOLIS	W3VPR	o(ca)e(Wx)z-911
147.12	147.72	MD	Churchville	NORTHEAST	N3CNJ	o(ca)zl
147.12	147.72	VA	Culpeper	NORTH CENTRAL	AA4VI	o
147.135	147.735	MD	Columbia	BALTIMORE	WA3WZA	oer
147.15	147.75	MD	Cheltenham	WASHINGTON AREA	W3PT	oe
147.165	147.765	VA	Warrenton	NORTH CENTRAL	NZ4N	o
147.18	147.78	MD	Silver Spring	WASHINGTON AREA	KA3LAO	o(ca)lr
147.195	147.795	DE	Dover	DOVER	W3HZW	o(ca)
147.21	147.81	VA	McLean	WASHINGTON AREA	WD4IWG	o(ca)e
147.225	147.825	DE	Wilmington	WILMINGTON	K3WAJ	o(ca)l
147.225	147.825	MD	Silver Spring	WASHINGTON AREA	WB3GXW	o(ca)lCTCSS-156.7
147.225	147.825	VA	Harrisonburg	NORTH CENTRAL	N4RAG	o
147.24	147.84	MD	E Baltimore	BALTIMORE	W3PGA	ol
147.24	147.84	VA	Woodbridge	WASHINGTON AREA	WB4FQR	o(ca)el
147.255	147.855	WV	Martinsburg	EAST	WB8YZV	o
147.27	147.87	MD	Potomac	WASHINGTON AREA	K4IWF	o
147.285	147.885	MD	Baltimore	BALTIMORE	W3BPX	o
147.30	147.90	VA	Bluemont	WINCHESTER	WA4TSC	o(ca)x
147.315	147.915	VA	Harrisonburg	NORTH CENTRAL	N4YET	o
147.315	147.915	VA	Alexandria	WASHINGTON AREA	W4HFH	ol
147.315	449.60	VA	Alexandria	WASHINGTON AREA	W4HFH	ol
147.36	147.96	DC	Washington	WASHINGTON AREA	N3AGB	o
147.375	147.975	MD	Chestertown	DELMARVA PENINSULA	WA3UJE	o(ca)erz-911
147.375	147.975	MD	Hagerstown	HAGERSTOWN	K3UMV	o
147.39	147.99	MD	Ellicott City	BALTIMORE	WA3WZA	o

See next month's Auto-Call for additional listing by Location.

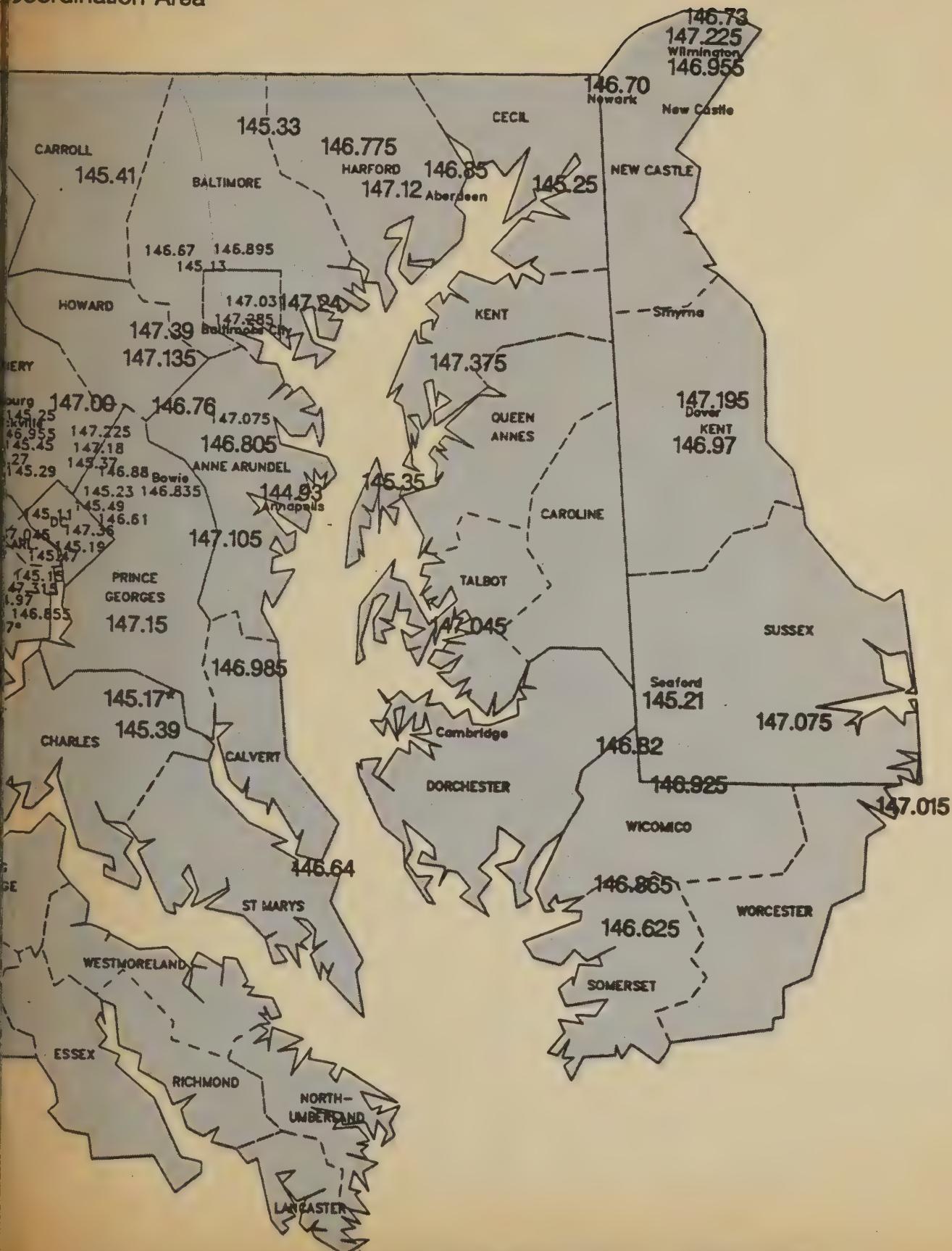


NOTE: Not to be used for coordination.

Uncoordinated repeaters and some private repeaters not shown.

# 11MHz Repeaters

## Coordination Area



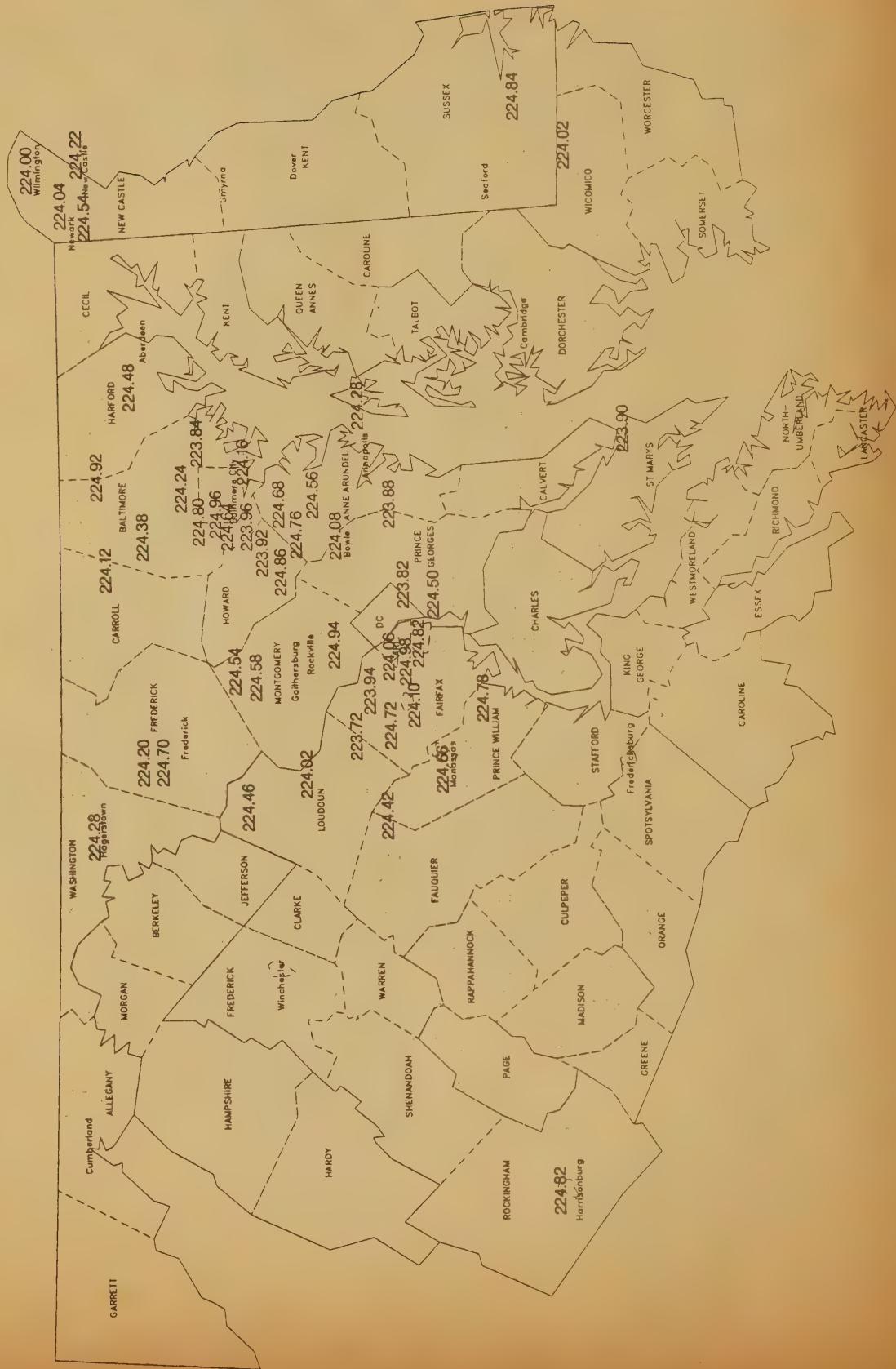
\* Temporary operation on Builder's Channel

## 222 - 225 MHz Repeaters

T-MARC Coordination Area

Data as of December 1991

© 1992 WA2WDT



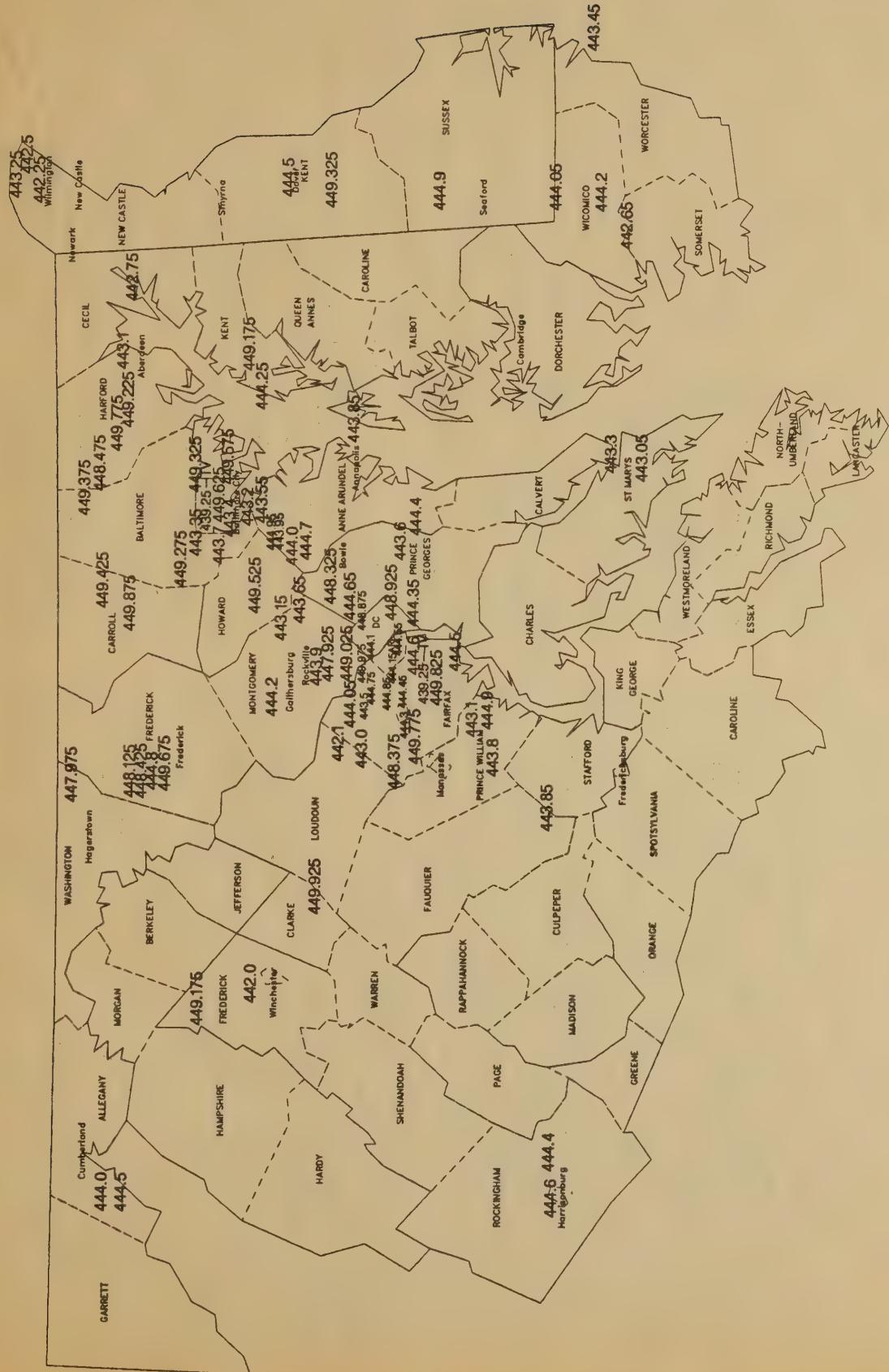
**NOTE: Not to be used for coordination.**

## 442 – 450 MHz Repeaters

Data as of December 1991

T-MARC Coordination Area

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**NOTE: Not to be used for coordination.**  
Uncoordinated repeaters and some private repeaters not shown.

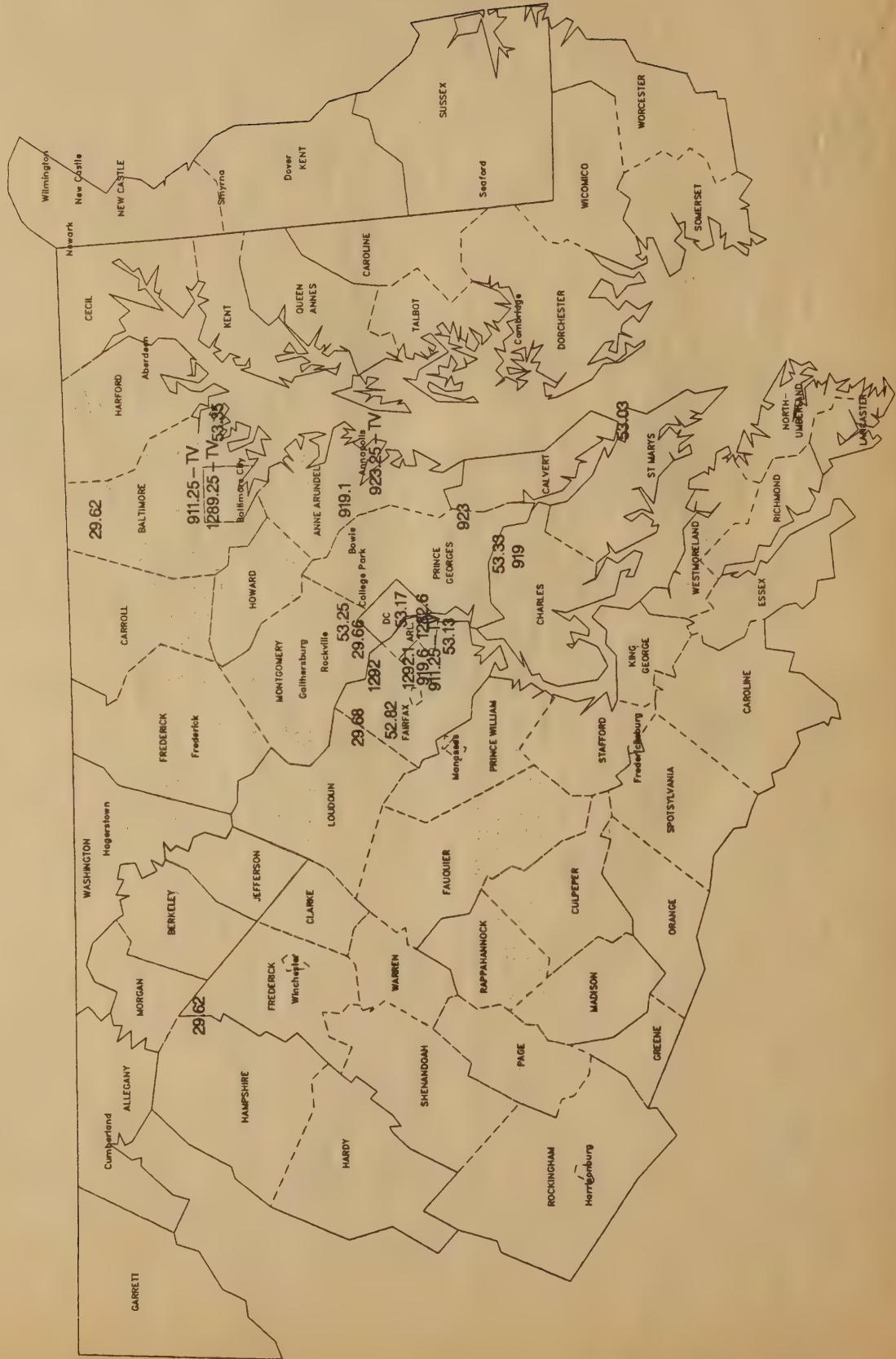
442.9 and 447.875 are the Repeater Builder's Channel's

29, 52, 902, and 1240 MHz Repeaters

Data as of December 1991

T-MARC Coordination Area

© 1992 WA2WDT



**NOTE: Not to be used for coordination.**

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*Uncoordinated repeaters and some private repeaters not shown.*

920 and 1283 are the Repeater Builder's Channels

## Silent Keys

**Ralph V. ("Andy") Anderson - K0NL** became a Silent Key May 4 at the age of 82. In 1952 he began editing a newsletter for the Washington Mobile Radio Club and adopted the name *Auto-Call*. In 1967 he became one of the founding member of the Foundation For Amateur Radio and offered the organization the rights to the magazine - with the stipulation that the name would be retained. He edited the *Auto-Call* until 1971 and then retained a paternal interest in it through the years.

Andy became a "legend in his own time." He joined the Naval Reserve in 1929 and served on active duty in the Navy Department, Washington, DC., for 5 years during WW-II and for 20 years thereafter in the Department of State. He was a "Rube Goldberg," who produced six different machines associated with the codes and ciphers business. For his efforts he received a Secretary of the Navy Commendation. He also organized the Maritime Mobile Amateur Radio Club and had a column in *CQ* for several years. He formed the Amateur Radio News Service in 1965, served as Editor for 23 years, and continued to be very active in the organization up to the time of his death. He funded two ARNS scholarships, which are administered by FAR. Much, much more should be reported about Andy. He will be sorely missed.

(Submitted by K4LMB)

**Dave Morris - KC4NDU** passed away on 28 March at the age of 74. He became a ham in 1990 and was very active in Woodbridge Wireless. He served as WWI Activities Chairman for about a year before his recent ill health. He lived with his daughter in Dale City, VA. (Woodbridge Wireless)

**Father Marshall Moran - 9N1MM, SK at 85.** Jesuit Father Marshall Moran, 9N1MM, died April 14, 1992, in New Delhi India after a brief illness. He was 85 years old and a legendary figure to DXers around the world. He was virtually the sole Amateur Radio contact with the Kingdom of Nepal for several generations of DXers. Father Moran had visited his home country, the United States, about every three years, attending radio club meetings in all parts of the country and leaving a lasting impression on thousands of hams. He had worked 100,000 different people in more than 200 nations. His ashes were returned to Nepal.

(ARRL Letter)

## AFCEA Amateur Radio Operator's Luncheon

The Armed Forces Communications and Electronics Association (AFCEA) Annual Amateur Radio Operator's Luncheon will take place on Wednesday, June 24th at the WASHINGTON CONVENTION CENTER. Tickets are \$25 to AFCEA members and \$30 to non-members (Credit cards accepted). Order your tickets from:

The AFCEA Programs Office  
4400 Fair Lakes Court, Fairfax, VA 22033-3899  
Phone (703) 631-6125

Please get your order in as soon as possible as this is a catered event and meals cannot be ordered at the last minute.

The WASHINGTON CONVENTION CENTER is conveniently located between Gallery Place and the Metro Center stations of the subway system.

We anticipate having a speaker from the FCC dealing with Amateur Radio matters. If you would like to make an announcement during this luncheon, or would like additional information, please contact the undersigned. Free admission tickets to the large exhibit area are available to attendees of this function. We look forward to seeing you again this year.

Stuart Meyer, W2GHK, AFCEA VP for Amateur Radio  
2417 Newton Street, Vienna, VA 22181  
Phone (703) 281-3806 FAX (703) 281-3868

# Tri-County Amateur Radio Club

Meetings:	Semi-annual business meetings, time and date announced on the air and in the club newsletter.
Repeater:	KA3LAO/R, 147.780 MHz in; 147.180 MHz out.
On-the-air:	Tuesdays at 1930 hours (Local time).
Mailing:	Amateur Radio Newsline Tuesdays at 1915 hours (Local time). P.O. Box 10592, Silver Spring, MD 20914

On Tuesday, May 5th, the Tri-County Amateur Radio Club held its Spring "eye-ball" meeting at the Adelphi Mill. It was a great opportunity to meet the faces that go with the voices we hear on the repeater. In between the socializing discussions were held about future club activities. Of interest to all was the planning for the second annual Holidayfest '92, to be held on December 6, 1992. Everyone who participated last year had a good time and we expect that this joint effort with the Goddard ARC will be even better. If you have not been in on the planning for a hamfest this is an opportunity to help in whatever way you can. Join our on-the-air net and we will direct you to the appropriate committee chairperson.

April 25th was a busy day for the Tri-County repeater as it supported the local Christmas in April program in Prince George's County. More than 20 Amateurs from the Tri-County and Laurel ARCs along with members of the Prince George's ARES/RACES organization provided communications support for nearly 200 locations where repairs and improvements were being done on the houses of the needy or handicapped residents. The wide coverage of the Tri-County repeater with its 5 remote receiver sites facilitated the communications from all areas of the county.

**Heard On The Repeater:** This feature of our report attempts to provide suggestions for efficient and effective use of the repeater:

○ We have heard several incidents during net operations where a station has contacted the net control station and asked a whole series of questions about what was happening. This is not a good practice while the net is still in operation since it disrupts the communications flow. If there are questions about what was going on they should be held till the net has shut down or taken to another local machine not involved in the operation.

○ All users should let our newcomers know that there is an initial delay when the repeater is first brought up. It is quite obvious that many users still are not aware of this noise reduction feature. If you hear someone who has chopped off the first part of their call or the call of the person they are calling, let them know to hold the transmit button a second before their initial transmission. It is only necessary to do this after the repeater has dropped for more than 30 seconds.

**NOTE for autopatch users:** when the control units were redesigned the auto dial number code sequence was changed. Now to use the auto dial numbers you should enter "\*nn" after you get the dial tone, where "nn" is the desired auto dial number (they did not change). The list of the auto dial numbers was provided with your autopatch access code package.

All are welcomed to join the Tri-County on the air net which meets each Tuesday at 1930 local. Make sure that you are listening at 1915 to hear the latest NewsLine information, ARRL bulletins and the latest exam schedules throughout the area.

New members are always welcome to join Tri-County ARC. We have a family membership plan which makes it convenient for our growing amateur families. Speaking of which, we would like to extend a welcome to one of our new members, Paul - K3ZIB. For membership information contact us at the post office box, join us during one of our club net meetings on Tuesdays, or contact Paul - N3GII, Tri-County Membership Chairman.

Don't forget that Tri-County ARC also operates a repeater in Ocean City on 147.015 (KA3BAF). All are welcome to use this machine when in the area.

Greg - WA3FSC

## Springfield Estates Elementary School Amateur Radio Club

Members and friends of the Springfield Estates Elementary School Amateur Radio Club gathered around their most recent guest speaker, LTC Curt Dubay, of the U.S. Coast Guard at their April 3 meeting. See the photo below.



LTC Dubay (center, in Navy uniform) presented a slide show discussion of the worldwide Omni Navigational System. Note the monstrously large sample parts of the Omni system held by some of the students: giant coax, relay and power cable.

The club held its first meeting last summer and already boasts 41 dues paying members. Ages range from 7 to 12 years. Nearly all members hold Novice or Technician class licenses. Club president Luke Ward - KO4IQ, age 10, earned his Advanced class call earlier this year. Third from left is mentor Lynn Wilson - K4DHB, age 78 and first licensed in 1929. Other recent guest speakers have included Dr. William Taylor, chief scientist for the U.S. Space Station, and Dr. Dianne Prinz, former space shuttle mission specialist.

The Springfield Estates Elementary School Amateur Radio Club meetings begin at 7:30 p.m. on the first Friday of each month at this Fairfax County school near Springfield Mall. Visitors are welcomed. For further information call (703) 971-1127.

Jim Wilson - K4BAV

### At the Other End

A small but growing community of octogenarian hams operators have banded into a network called OCTO. The net operates every Tuesday at 1830 UTC on 7.230 LSB and at 2000 UTC on 14.045 CW (all frequencies plus or minus QRM).

It's very easy to join OCTO. You just need to be 80 years of age or over. Nets are informal, there are no fees. A monthly bulletin is supported by informal postage fund gifts. For information contact Lou Nees - NT3S, 45 Marian Terrace, Easton, MD 21601

(From WorldRadio May 1992 Page 7)

# Fauquier Amateur Radio Association

Meetings:	Second Tuesday of each month, 7:30 p.m. Local. No July or August meetings.
Repeater:	Shadow Lawn Center, Warrenton, Virginia.
Digipeater:	NZ4N/R 147.165 Mhz out; 147.765 Mhz in.
BBS:	K4LLQ-5 145.070 Mhz.
Net:	N4YXW-1 145.090 Mhz.
	Every Wednesday night at 9:00 p.m. Local, NZ4N/R

The meeting was called to order at 1935 hours EDT by the President, WY2V. Roll call was taken.

First order of business was the mention of deliberate interference on the club repeater. Triangulation measures were to be used to establish the area of the offender. We already have a good idea of where the signals are emanating.

We have a verbal agreement on the use of the area across the street from the Jamesway store for our use as a Field Day site. Jim Kranda - KC4UOL, has donated the use of a large motor home for Field Day. This is a welcome addition (remember the '91 Field Day weather?). Many thanks, Jim.

Six out of seven students in N4VJW's Novice/Technician class have passed written elements. An outstanding job, Nelson. The next scheduled testing session will be May 18.

We have now received written Army approval for our special event station, K4LLQ, at the Golden Anniversary of Vint Hill Farm Station. Many thanks to Larry - K4LLQ for driving that program.

The club voted on having another club tailgating section at the Manassas Hamfest on June 7. If you have anything left to sell after the auction at the April meeting, you have another chance to get rid of it in Manassas.

Valeria - KC4SYY, discussed her ideas on the food situation for Field Day.

Thanks to Ed and Donna Ober - KC4EFJ and N4URL respectively, most members in attendance made application and received picture ID cards as members of ARES. This was an important undertaking that was long in coming, but has now been finalized. Many thanks to our friends from Fairfax County.

The meeting was ended with our annual club auction. There were many good deals, one of

the best being 100' of 1/2" hardline with connectors which went for \$30. (The hardline and connectors were new, and represented about a \$225 wholesale cost). Other items sold were a TNC, phone patch, power supply, antennae, books, test equipment, etc. The club enriched it's coffers by taking it's cut of the sales.

Neil Spokes - AB4YK, one of FARA's hams has come up with a novel explanation for the basis of VHF Sporadic E. He concludes that the remarkable findings of Emil Pocock and Pat Dyer, reported in the March 1992 QST, can be explained only in terms of streams of interplanetary debris such as are released by comets in their path around the sun. When they collide with the ionosphere these streams of particles lead directly to the observed effects that have tantalized and fascinated us for so long. Details were presented in the April and May issues of *TOROID*, the FARA newsletter, and in an article that he has sent to QST. Neil's findings lead him to offer the following predictions:

1. Researchers will establish a correlation between the VHF Sporadic E occurrences and the existence of these trails of cometary matter.

2. VHF contests will be arranged to coincide with the days when the Pocock-Dyer forecasts predict an optimum chance of VHF Sporadic E.

3. Researchers are going to find some new ionospheric ion-molecular and electron recombination / photo-detachment phenomena and processes. This will come from new research that will be stimulated by the Dyer findings.

Somewhat tongue in cheek, Neil also comments that since the big date-specific day to day fluctuations of the VHF Sporadic E are clear manifestations of the influence of astral bodies on our planet, they are therefore going to be very exciting to Astrologers. He says "It's their best shot in centuries."

Dan - N3ND

# Southern Patuxent Amateur Radio Club

Meetings: 2nd Wednesday of each month at 7:00 p.m.  
Southern Community Center, Lusby, Maryland

Repeater: W3ZNW 146.985 (out)/146.385 (in) Sunderland, Maryland  
N3JTG 147.195 (out)/147.795 (in) Leonardtown, Maryland  
N3AGB/R 443.30 (out)/448.30 (in) St. Leonard, Maryland. Autopatch for members.

Address: 1445 Parran Road, St. Leonard, Maryland 20685

Information: Jay McClain - N3HUU (301) 994-2133 or  
Dwayne Kincaid - WD8OYG (410) 586-2177

New Amateurs are filling the airwaves in Southern Maryland this month. About 32 new Technician Plus Amateurs received their call signs during the last week of April. Many stood by their mail boxes with radio in hand waiting for the call signs to come in. Others stood by the mail box with call signs in hand waiting for tax refund checks to come in. Early estimates have shown that over 15 new radios were acquired for VHF/UHF and more than five for HF. Seems that even Tech Plus' are opting for entry into the VHF/UHF world first.

The new Amateurs were mainly attributed to the recent Novice/Tech class sponsored by the Southern Patuxent ARC. (See photo below)

Instructors Mike Markowski, Nick Gravelle, Steve Franc and Dwayne Kincaid finished up the class early in April and collected over 25 new Novices. Others in the class of 41 either already had a Novice and were studying for Tech or took the Novice and Tech at the VE session. The photo was taken at one of the class sessions.

Seventy-two exams were given at the last VE session in California, MD on April 2. This was the largest VE session given in this area and the big turnout took examiners a little bit by surprise. The recent graduates of the class and the exams include: Larry Ullom, Deborah Ullom, Brian Lutz, Craig Kinman, Paul Maassel, Bruce Kinman, Philip Maguire, Moira Maguire, Andy Buck, Carlos Young, Bertrand Berube, Steve Jones, Sally Gravelle,



Kari Dagey, Adrienne Donaldson, Joseph Wilkerson, Richard Pence, Jr., Ed Bowen, Donald Milliken, Jr., Robert Kinney, Susan Bennett, Colleen Tehansky, William Stone, Tony Byrd, Shelby Guazzo, Gene Guazzo, Gary Tucker, Matt Neuslein, Alta Mitchell, Richard Duff, Matt Brown, Matt Gambrill, William Stone, Bobby Dodson and Elain Dodson. The influx of new hams has brought nine new members who joined the club this month, bringing the Southern Patuxent membership to over 150.

Two big events are planned for June. The first, of course, is Field Day. A bigger and better Field Day at Cove Point Park (near

Lusby) is planned with all out camping and cooking and radioing. Hopefully, the 99% percent rain we got last year will be replaced with 99% sunshine this year. The other event is the Muscular Sclerosis Bike-a-thon on June 6 and 7. Southern

Patuxent members will team up with BRATS to provide communications for the event.

Jerry Bushman - N3DVD gave an excellent presentation at the May club meeting about the Shuttle Solar Backscatter Ultraviolet (SSBUV) project at NASA that he is involved with. The project provides Ozone measurements and calibrates existing instruments aboard the Space Shuttle flights. A 20 minute video on the project followed by a question and answer session rounded out the meeting that had record attendance.

Dwayne - WD8OYG

# Northern Virginia FM Association, Inc.

Meetings: 3 times per year (fall, spring, winter)  
Weekly Nets: NVFMA Net: Every Wed., 8:00 p.m. local, 146.79  
ARES/Public Service Net, Every Sun., 9:00 p.m. local, 146.91  
On Air Equipment Clinic, First Wed., 7:30 p.m. local, 146.79  
Repeaters: 2-Meter: 146.79- (W4LBL-FFX City) & 146.91- (W4XG-Tysons Corner)  
440 Mhz: 444.75+ (K4JYF-Tysons Corner)  
220 Mhz: 224.100- (WB4YHD-FFX City & X-linked to 146.79)  
224.34- (KB4CVL-Tysons Corner)  
1292.1 output 1272.1 input (K6LEW-Tysons Corner)  
Membership Info: Norm Rosenthal - KB4VLP, (703) 425-7108 or  
Margaret Lindsley - KB4IKU, (703) 818-8182  
Mailing Address: NVFMA, P.O. BOX 486, McLean VA 22101

The 146.79 - (W4LBL) repeater is located in the penthouse of the Massey Building in Fairfax City, Virginia. This repeater is a wide-area coverage machine with coverage south to Stafford, north to Laurel/Columbia, west to Front Royal and east to Annapolis. The machine presently has three remote receivers. They are located at Bull Run Mountain, Independent Hill, Virginia, and Beacon Hill, Virginia. A fourth remote site in Tysons Corner will come on-line during the next months to cover the RF hole in the I-495 American Legion Bridge area as well as a significant portion of Maryland and the District. The repeater has emergency power and is magnificently maintained by Joe Herrmann - WB4LBL and a number of his control operators. The repeater has auto patch privileges for NVFMA members and an RC85 controller with test pad and signal strength functions. The NVFMA Bulletin is held on this repeater each Wednesday evening at 8 p.m. A technical clinic for checking radios is held at 7:30 p.m. on the first Wednesday of each month before the bulletin.

A new six meter repeater is expected to be on the air in Tysons Corner this summer.

Dan - KC4OCG

The Foundation For Amateur Radio, Inc. <sup>TM</sup>

Announces

The 35th Annual

**F.A.R.FEST** <sup>TM</sup>



1992



**SUNDAY, SEPTEMBER 13, 1992**

**Montgomery County Agricultural Center (Fairgrounds)  
Gaithersburg, Maryland**

# Montgomery Amateur Radio Club

**Meetings:**

1st and 3rd Wednesdays of each month at 7:30 p.m.

Executive Office Bldg. Montgomery Co. Government Center,  
101 Monroe St., Rockville, MD. Park underground on G-2.

146.355 in (Rockville & Germantown)/146.955 out (Rockville)  
M.A.R.C., P.O. Box 611, Gaithersburg, Maryland 20877-0611

Jeff Horlick - KZ3F (301)258-0112; Steve Todd - K2IYQ (301)253-4172

Ken Nichols - KD3VK (301)977-5405; Dick Hayman - K3DML (301)251-8721

**Repeater:****Mailing:****Information:****Training:**

So many Montgomery Amateur Radio Club events to report; so little space to record them all! Let's start with a hearty round of applause for Ron - W3GIS who again this year orchestrated one of the premier Public Service Events of the Season - Fritzbe's 10K! 4,000 runners, (comprised of competitive, casual, and wheelchair participants) owe their collective safety and well-being in large measure to the 2-meter radio communications provided by Ron and his crack team of Amateur Radio operators. Due to the selfless efforts of the following volunteers, there were NO injuries or accidents: Ron - W3GIS, Jeff - KZ3F, Don - KA3CTR, Allison - N3EWE, Andy - KV3S, Ross - K3USO, Jane - KA3YWU, Josh - N3KHU, Dick - WB3AA0, Roz - N3JHY, Kevin - N3LGA, Bill - W3WON, Ray - N3HTB, Jamie - N3IDF, Manny - KD3BU, Sue - N3JGM, Stan - W3INK, Howard - N3IPV, Jack - W3CBQ, and Erinn - N3HSA. NOTE: As various other Public Service events are supported by the Club, they too will be published here in YOUR M.A.R.C.-customized AUTO-CALL news.

The regular M.A.R.C. meetings of April 1 and 15 were noteworthy both for their quantity of participants (approximately 50 at each) and quality of program presentations. The first meeting of the month featured an eclectic mix of hardware "show and tell" (not the least of which included an assortment of antique CW keys) and a professionally produced videotape of several DX "BIG GUNS" feverishly pursuing their HF prey during a World Wide DX Contest several years back....

The second M.A.R.C. meeting for the month of April was equally noteworthy for the program presentation given by Jeff - KZ3F, entitled "Paper-Chasing." Naturally, Jeff's talk addressed the birthright of every ham to participate in the cherished sport of certificate hunting. Starting with his own experiences as a "licensed" Short Wave Listener, KZ3F

summarized it well by stating that success is guaranteed to the participant who can meet the following two mandatory requirements:

1. YOU GOTTA WANNA...and
2. YOU GOTTA DOIT!

By the time this column is published and delivered, M.A.R.C.'s first-ever upgrade licensing class will be a "done deal." However, your Amateur Reporter couldn't let this momentous event pass into history without personally thanking the Instructors and Technical Coordinators who made the class possible. Thus, appreciation is hereby formally expressed to the following individuals who gave of their Elmering time and talents: Ken - KD3VK, Steve - K2IYQ, and most especially to the theory and code instructors--without whom there could be no course conducts: Rick - K3YNY, Alan - N3EHD, and John - W3QF. Based on the overall success of the class, it may be possible to arrange for future Novice and upgrade courses on a "resources-available" basis....

Stay tuned to 146.955 MHz!

Erinn - N3HSA

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# Vienna Wireless Society

## 25 Years of Public Service

Meetings:	2nd and 4th Fridays of each month, 7:30 PM
Repeaters:	Vienna Community Center, 120 Cherry Street, Vienna, VA K4HTA/R 146.085 in/146.685 out, 222.340 in/223.940 out, 448.250 in/443.250 out, 443.375 in/448.375 out
Nets:	Vienna Emergency Net every Thursday at 7:30 p.m. 146.085 / 146.685. Pow Wow Net every night except meetings at 9:00 PM on 28.444 (after 6/15) Slow Speed Code every night except meetings at 8:30 p.m. 28.390 MHz "
Information:	Margy Patterson - N2JRG (703) 620-1727
Training Classes:	Paul Wilkins - AB4CY (703) 560-2779
Mailing Address:	P.O. Box 418, Vienna, VA 22183

At our April 10th meeting, Smiley - WB4EDB brought a rather impressive display of keys. To be precise, bugs. I have never seen a collection this large. He not only showed us different types of bugs but gave us a history lesson in radio and corporate America. I think everyone could have stayed to poke through the collection a bit longer.

For our April 24th meeting Andre Kesteloot - N4ICK, President of AMRAD, gave a presentation on Spread Spectrum. He managed to give a very good idea of what spread spectrum is and how it is used. During his short presentation he spared us the high end math and the more difficult technological explanations. For those interested in learning more about spread spectrum he refers to the ARRL Spread Spectrum book which he edited.

The VWS will be changing the time and/or frequency of our NETS. As of June 15th, 1992 the "Pow Wow" net will move from 28.400 to

28.444. The time will remain at 9:00 every night except meeting nights. Thursday will be "Amateur Night" with net control rotating to give everyone a chance to run the show. The slow code net will remain on 28.390 but will move to 8:30 pm. The 2-meter VEN will continue Thursdays at 7:30 on the 146.685 - repeater.

Now it is time for all of us to think about FIELD DAY! The Vienna Wireless Society will be holding its Field Day event at Burke Lake Park. We have had very good luck at this location and hope to have a great time. We are lucky enough to have Art Van Wagenen - N4JMJ as our Field Day Chairman. Last year we had quite a turnout and a lot of fun. I'm sure it will be a great Field Day. If you want to drop by you're more than welcome.

Margy - N2JRG  
President VWS

## Space Link

NASA has established a computer BBS accessible to the public. The NASA Space Link consists of a large data bank with hundreds of articles, photos, and reports regarding NASA activities. There are many items of interest to Amateur Radio operators. To read the Amateur section: at menu one select 6; at menu two select 2; and at menu three select 18. To reach the photo section: at menu 1 select 9; at menu 2 select 11; and at menu 3 select 6.

Space Link supports both IBM compatibles and Apple computers. The service is free, menu drive and "user friendly." The only cost is the cost of the phone call. The system is on-line 24 hours a day and can be reached at (205) 895-0028.

From KE9WA in WorldRadio May 1992, page 6

# Goddard Radio Club

WA3NAN

Meetings:

Third Wednesday of the month at 5:00 p.m. Goddard Radio Club Station, Soil Conservation Road, Greenbelt Maryland, across from the Soil Conservation Road gate of the Goddard Space Flight Center. This road may be accessed from either Route 193, Greenbelt Road, or Powder Mill Road.

146.835 MHz

Repeater:

Net:

Information net every Thursday evening at 9:00 p.m. local time.

All Amateur Radio operators are welcomed.

Chuck Sommer - N4OSD (301) 794-3280 or

Vikki Gigante - KA3PVS (301) 249-2609

Well, when you read this, STS-49 will be behind us. Hopefully, it will be a successful maiden voyage of Endeavor. This mission is the repair and reboost of the Intelsat satellite. The next mission is in June and we will be covering both of them for shuttle retransmission. This mission will be the maiden voyage of the refurbished, extended duration mission Columbia and will be up for thirteen days with the microgravity lab. Well, the Goddard Club has taken a step toward making sure that we will not be caught without radios during a mission. We were able to excess some KWM-2's from Fort Meade and so far, some of them even work. Hopefully, these workhorse radios that have seen us through so many missions will continue to operate just fine and now we won't have to panic so badly when a radio goes down during a mission. Thanks to Chuck and John Stolarik for the painstaking effort they put into obtaining these radios. Also, thanks to Ron Parise and Dave Gossard for helping to transport them.

There have been some new harmonics in the Goddard Club since last month. Ms. Johanna Marie Gigante-Hueber made her appearance on April 8 and Ms. Rebekah Shawn Kilroy joined us on April 10. Both girls and their moms are doing well. We aren't too sure if the fathers have recovered as yet. Thanks to all of you for your well wishes and congratulations! Once again, the Amateur Radio community has proven itself to be most gracious and supportive.

There is currently an Amateur Radio class for novices and technicians being held at 4700-D Boston Way in the Washington Business Park in Lanham, MD which is being taught by Pat Kilroy and is sponsored by the Goddard Radio Club. There will be a testing session for this class on June 9 and if anyone else is interested in taking a test, please contact Pat to preregister. He can be reached at (301) 249-3396 (h) or (301) 731-8695 (o).

We would like to take this time to bid a fond farewell to Doug Loughmiller of AMSAT. We understand that he has not had his contract renewed as full time fundraiser for the organization. We received a great deal of help from Doug during the past SAREX missions and he will be sorely missed.

The coffee mugs are in. If you would like a coffee mug with the shuttle retransmission frequencies on it as well as a beautiful picture of the shuttle, please contact Chuck at 286-6790 or Vikki at 249-2609 to order one. This is our fundraiser for the club and for shuttle retransmission this year. Now, you have no reason to forget the shuttle frequencies ever again, you can look at them while you drink your coffee or tea! See you at the hamfests this summer!

Happy Father's Day to all!

Vikki-KA3PVS

## New 2-Meter AMSAT Net

A new AMSAT 2-meter FM net serving the local area is growing rapidly. The net meets at 9:00 p.m. local time each Sunday on 146.835 MHz FM - the GARC/AMSAT Repeater. NCS is WD8LAQ. For more information, check in - or call (301) 249-3396 (Bowie, MD) or packet WD8LAQ@WB3V.MD

Watch Auto-Call for more news.

# Annual Foreign Service Amateur Radio Banquet

Department of State Amateur Radio Club - DOSARC - W3DOS  
Voice of America Amateur Radio Club - VOA ARC - K3EKA

The thirteenth annual Foreign Service Amateur Radio Banquet, sponsored jointly by the Department of State Amateur Radio Club (DOSARC) and the Voice of America Amateur Radio Club (VARC), was held at Fort Myer, Virginia, on 28 April 1992. Twenty-six local Amateurs and family members attended, including WA1LBP/KD4BMJ, WA2ICO, W3EVD, WA3FYZ, WQ3H, KG3R/WB4J, W3SWD, K3TW, K3ZO, W4HU, W4KM, K4LMB, W4MLR, W5DRP, W6GJN, WB7CSL, and NØMCL. A particular welcome was extended to Ethel Smith - K4LMB, Auto-Call editor, as well as to Dave Cowhig - WA1LBP, and his nine-year-old daughter Frances - KD4BMJ; the Cowhig family is to leave shortly for Japan on a Foreign Service assignment.

Four presentations were made after dinner: Tom Warren - K3TW, DOSARC president, showed slides of last year's antenna renovation atop Main State and its 1991 Field Day site in Temple Hills, Maryland. He dedicated a final set of slides to Father Moran - 9N1MM, who became a silent key in April 1992 and whom Tom had visited during a trip to Nepal in November 1986.

Al Brown - WA3FYZ, VARC president, described the VOA QSO Party held during February 1992 to commemorate the Voice of America's 50th anniversary. CN8VOA, DX2VOA, ED3VOA, SVØVOA, and V31VOA, had been assigned by foreign governments in connection with the anniversary, and K3VOA would soon replace K3EKA as the VOA club station call.

Fred Laun - K3ZO, former DOSARC president, suggested ways to bring about an Amateur Radio movement in a developing country where none exists. One way is to form an Amateur Radio club. Another is to identify local residents with technical or communicating skills that would enable them to become the nucleus of an Amateur Radio movement.

Walt Ireland - WB7CSL, former VARC president, described how he had coped with various Amateur Radio problems between 1959 and 1972 during tours or TDYs in Japan, Korea, the Philippines, Thailand, and Viet Nam. Originally licensed as K1FUW in 1958, he has held HL9KV, HS1WI, KA2ID, and KH6HLA.

Dex Anderson - W4KM

## Prince George's Wireless Assn.

Meetings:	First Working Tuesday of each month, 7:30 p.m., American Red Cross Service Building, 6206 Belcrest Road, Hyattsville, MD 20782
Club Station:	K3CEZ
Mailing:	4109 Kennedy Street, Hyattsville, MD 20781
Information:	Frank Holton, WA3ZMW (301) 927-1245

On Sunday, May 3, club members participated in the annual "CROP" Walk at the Hyattsville First Methodist Church. The CROP Walk is a fund raising event for trying to relieve hunger throughout the world. Club members acted as Communication Monitors throughout the two walks and jogging routes. The lead runner was a 52 year old who completed the 7½ mile walk in just 55 minutes.

Club participants were Hersh - W3SWD, Frank - WA3ZMW, Charles - KA3COT, John - WB3FUL, John - N3LYB, Tony - N3JWT (Runner), and Kenny - N3HLY.

Ken Easton - N3HLY

# Woodbridge Wireless, Inc

Meetings:	2nd Tuesday of each month, at 7:30 p.m. [1/92 change]
Repeater:	Canteberry Woods WB4FQR/R 147.84/24 and 449.9/444.9 WB4GJZ/R 223.18/78
Nets:	Mondays, 8:00 p.m. local (0100 UTC) 147.84/24, 223.18/224/78 (the repeaters are linked for the net.) Wednesdays, Slow CW at 8:00 p.m., 21.164 MHz Saturdays 9:00 p.m. - in new 10 Meter Novice band 28.460 MHz SSB
Mailing Address:	P.O. Box 112, Woodbridge, VA 22194

Spring is here I think, although Old Man Winter seems loathe to give up. In spite of the cold days, the flowers and trees are blooming. The Woodbridge Wireless has new hams blooming too. We're beginning to see more and younger family members. It's neat hearing young voices on the local repeater. They're getting opportunities to join club activities, too.

Sadly, our Activities manager, Dave - KC4NDU passed away after a long illness. We'll miss his smiling face and gentle ways.

WWI support to the crew races on the Occoquan on April 25th included getting assistance to a crew whose shell was taking on water, getting evacuation and medical assistance to an adult with hypothermia, and likewise for a motorboat driver who slipped backwards and injured his head. We need volunteers to come out to support these events - even if for only a couple of hours. You ARE needed! Bob - NQ4K is coordinating support to the crew races, give him a call. The schedule calls for races on May 9th, May 22nd (Fri) and 23rd, and finally June 6th and 7th.

WWI was asked to provide radio support to the 7:30-11:00 May 16th Annual CROP Walk in the Oakwood-Antietam-Mohican area of Lake Ridge. It is a 10km pledge-walk to raise \$10K to help hungry people around the world. Twenty-five percent will remain local to help through ACTS. WA2IKI chaired this event.

Much of our scheduled community support comes in the spring and has been pretty much coordinated. However, with the passing of Dave - KC4NDU, WWI needs a new Activities Manager to start coordinating support to the Dale City 4th of July parade.

Last March I wrote about a less than genteel packeteer. After Auto-Call was published, I was contacted by a ham who

thought I was writing about him and assured me his (technician) callsign was being pirated. Unfortunately this is becoming more and more common. The person who entered uncomplimentary messages on a local bulletin board system was not only a bad example of a ham, he (or she) was a thief, using someone else's call and trying to steal their good name. I'd seen similar comments entered under another callsign. Perhaps the person is a ham (I'd rather think not). Maybe we need to have embedded IDs in each packet box so that such piracy can be readily identified.

Anyway, I need to apologize to all Technician class hams for saying that the class was not a lofty perch from which to comment on the codeless license. 'Truth is, any class license represents a great investment in time and effort and is truly something to be proud of. All hams deserve to be heard and the class of their license is not a valid basis for their credibility. In fact, I've listened around on the bands, and it is the higher class licensees who are causing most of the mayhem. We need to keep teaching newcomers that Amateur Radio is to be marked by courtesy and care for others and we need to practice what we teach.

Jim - WJ4M



Attention Amateur Radio Newsletter Editors. AMATEUR RADIO NEWS SERVICE is an organization of publishers and editors of Amateur Radio newsletters and members engaged in public relations. Its purpose is to assist editors in any way possible. For information, write to Lee Knirko - W9MOL, 833 Park Plaine, Park Ridge, Illinois 60068

# Green Mountain Repeater Association, Inc.

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Meetings:	Board of Directors / Control Operators, Last Monday each month.
Luncheon:	First Saturday each month at Fountain Care, Laurel Shopping Center Mall, Baltimore Avenue, U.S. Rt 1 and Cherry Lane.
Repeaters:	KD3VR - 146.61 (Cheverly) and K3GXF - 146.88 (Greenbelt)
Mailing:	GMRA, P.O. Box 429, Riverdale, Maryland 20737
Information:	Boyd Nelson - KZ3Z (301) 434-0934

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The Green Mountain Repeater Association, Inc. held its monthly Board of Directors meeting on April 27. One of the topics discussed was that some changes, updates and revisions should be made in the By-laws of the Association. These changes will be mailed out to members.

During last month's luncheon, some interest was expressed among members concerning the possibility of building VHF amplifiers in kit form for hand-holds. Joe - KD3VR thought this would be a good project for those who would be interested. Joe mentioned that he could do the PC boards and that the kits would run under \$50. They would run on 12-volt power with, say, 2 watts in and maybe 40 watts out.

This project is not restricted to just members. Anyone interested can call Joe Nunemaker - KD3VR at (301) 577-3749 evenings after 7 p.m. Membership in GMRA is extended to qualified licensed Radio Amateurs of at least technician class or higher. The current dues are \$15 per year. Don't forget the luncheon on the first Saturday of each month.

Please note: The writer acknowledges an error in last month's article concerning the location of the two Green Mountain repeaters. KD3VR - 146.61 is located in Cheverly, Maryland and K3GXF - 146.88 is located in Greenbelt, MD. Thank you for your forbearance.

Ken Easton - N3HLY

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## M A D R A S

### The Maryland Apple Dumpling Radio Amateur Society Inc.

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Meetings:	2nd and 4th Thursdays of the Month - 7:00 p.m.
	At the NBC Building, 4001 Nebraska Avenue, N.W.
Repeater:	444.100/449.100 MHz 145.45/144.85 MHz
Information:	Scott Standiford, W3YTW (301) 589-9321 or BBS Larry Zeicheck, N3GKZ (301) 984-6112

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June 11th Thursday - Regular meeting at NBC. The program will be on component level construction projects. June 13 Saturday - The Field Day committee gets together to cut antennas and continue planning for this event at this year's site - 11800 Coakley Circle in Rockville. This year you can ride the subway to Field Day, as this is convenient to the White Flint Metro station. Sorry, but this site lacks mosquitos, ticks and gnats. There is a small patch of poison ivy for those who feel Field Day is not complete without it.

We will be needing phone and CW operators who have had some contest experience for

Field Day. If you are interested, call Jean Blacik at (301) 98-6112.

The MADRAS special event station, WK3X, at Backbone Mountain in Garrett County, Maryland racked up over 450 contacts. We will be sending out a QSL commemorating the "Source of the Potomac" to those who have sent their card and S.A.S.E. Participants included: Larry - N3GKZ, Charles - KD3IM, Laquette - KK3WQ, Hani - N3IWM, Mike - KA3ZTF, Bill - N3EYF.

Thanks to all and see you at Field Day '92.

Scott - W3YTW

# National Capital DX Association

Meetings:	Irregular. Next meeting June 20 Contact the Secretary for information.
On-the-Air Information:	Every Sunday at 8:30 p.m. on 147.420. All are welcome. Craig Stevens - KZ3H (301) 774-3410

Plans for DXPO '92 are well underway. The National Capitol DX Association is hosting DXPO on October 10 and 11 at the Holiday Inn in College Park. Sessions are planned from noon until 6 p.m. Saturday and from 8 a.m. until Noon on Sunday with a Banquet Saturday.

We have eleven speakers on the program so far with five more invitations still out. The program will include the XU1SS story by W1RAN, Auto-tuning shunt fed tower for 80 & 160 meters by W3AZ, presentations by N2OO, K3ZO and K3TW on operating from all over the world, a DXAC forum, an ICOM presentation by WY7V, ICOM's Bellevue Service Supervisor, QSL card checking for ARRL and CQ DX awards, and LOTS of door prizes. Invitations are still out to Mr. PacketCluster, AK1A, Kenwood and Ten Tec, and a very prominent Finnish DXer and Contester who has been

responsible for putting several all time new countries on the air. DXPO promises to be educational for the beginning DXer, the old timer on top of the Honor-Roll, and everyone in between. This will be a great opportunity to have eyeball QSOs with some of the rare DX that has been on the bands lately and to rub elbows with some of the big names in DXing and Contesting. Further information and registration forms may be obtained from Joe Sciuto, N4MQX, at (703) 922-1728 or Stu Meyer, W2GHK, at (703) 281-3806.

The next meeting of the National Capitol DX Association will be held on Saturday, 20 June at NK4U in Fairfax. Attitude adjustment hour will begin at 4:00 p.m. with the business meeting at 5:00 and dinner at 6:00. Please let Nancy know if you plan to stay for dinner.

KO7V

## Maryland Mobileers

Meetings:	First Friday of each month at 7:30 p.m.
On-the-Air Address:	Anne Arundel County Emergency Operations Center, Crownsville, MD
Information:	Every Monday night at 8:30 p.m. on 146.205/805 P.O. Box 935, Severn, Md 21144 Bill Howard - WB3V (401) 551-6775

Fourteen of us made up the Maryland Mobileers contingent to Dayton this year, with two of us as first-timers. If you haven't heard by now, it was one of the coldest and wettest Hamventions in recent memory. Nevertheless, everyone in the group enjoyed the trip, and plans are being made for next year.

Field Day is just round the corner and once again the Maryland Mobileers will be operating at Downs Park in Anne Arundel County. In addition to the traditional CW and SSB stations, we will be operating ATV, satellite, and packet. A separate Novice/Tech station will be set up

and a big push is being made to get our new ham members to try their hand at Field Day.

The club has acquired a 400 MHz repeater and hopes to have it on the air soon. It will be co-located with the 146.205/80 machine in Millersville. The coordinated frequencies are 444.125 MHz receive & 449.125 MHz transmit.

Many people have noticed the Mobileers' bright yellow jackets with the colorful Maryland flag on the back. In the coming summer months, watch for a Mobileer's T-shirt with a similar design.

Jim - N3EI

# AMRAD

## Amateur Radio Research and Development Corp

Meetings:	Second Thursday of each month, Fairfax County Library, McLean, Virginia
Repeater:	WD4IWG 147.81 MHz in, 147.21 MHz out. Director, Jeff Brennan, WB4WLW
Data Address:	WD4IWG is an open repeater for FM voice and digital communications, especially for experimental modes. Autopatch available to members.
AMRAD CBBS:	Our internet address is lkestel@csugrad.cs.vt.edu.
Information:	(703) 734-1387 Operated by Lawrence Kesteloot - N4NTL E-Mail address is lkestel@csugrad.cs.vt.edu Andre Kesteloot - N4ICK (703) 356-5519 or Terry Fox - WB4JFI (703) 698-7612

At the April AMRAD meeting, Hal Feinstein - WB3KDU gave a talk on lasers. On 14th May a talk on X-Band marine radars was presented by Glenn - KA0ESA and Bob - W8MAU.

**Current Activities:** On Saturday, 18 April, a number of the AMRAD gang gathered at the N4JGQ microwave laboratory and test range to modify and tune up 10-GHz sources. Approximately 20 sources were tuned under the direction of Glenn - KA0ESA. One 10-GHz QSO was conducted over a distance of 15 feet (real DX)! Further working sessions are planned.

Anyone interested in any of our projects or technical topics, come to one of the monthly meetings, or join us for lunch. We meet every Saturday at 1230 hrs at Taco Rio Grande on Rte 123 in Vienna. AMRAD repeater for talk-in.

**Up-coming Activities:** The public service season is upon us, and several events supported by AMRAD members and the AMRAD portable repeater, are scheduled:

May 30-31 100-Mile Run, Fort Valley, VA  
Jun 13-14 OD 100-Mile Endurance Ride, Fort Valley, VA

Volunteers are needed for all these events, especially people in the Shenandoah - Warren - need of some person/people to take over the events in Shenandoah County. Please contact Dave Rogers - N4JGQ @ (703) 237-5465

Dave - N4JGQ

### HT Alert

The new Radio Shack HTX-202 2-meter handheld transceiver comes from the factory designed to power up smack dab on 144.200 FM. The first memory channel is also pre-set to this frequency. 144.200 is the frequency designated in the national band plan for working weak signal CW and SSB transmissions. Considerate operators keep FM activity well above 144.300 MHz.

In the May issue of WorldRadio magazine, Gordon West - WB6NOA expresses concern that beginning hams who buy this transceiver will be not be aware of the problem. He cautions, "let's be as polite as we can when the inevitable QRM occurs." It is expected that future productions of this units will be reworked to come up on the FM portion of the band.

West gives high praise to the HTX-202 otherwise. He says its a bargain of a radio which "features an extremely tight receiver with enough bandpass filtering to cancel out troublesome intermodulation encountered with other hand-holds at twice the price. ... With it's red-hot receiver, it's bound to be a hit for beginners."

(From WorldRadio May 1992, Page 3)

# Arlington Amateur Radio Club

Meetings:	Third Tuesday of each month at 7:30 p.m.
Net:	Arlington Red Cross Chapter House, 4333 Arlington Blvd. (Rte. 50)
Info:	Tuesdays (except meeting nights) at 7:30 p.m. on 144.87/145.47 MHz FM

## April Meeting

Turn-out was light at the April 21 meeting. Was it the drizzle? Or were regulars packing for Dayton? Some were! Fortunately a few members were on hand to greet two visitors—prospective hams who had read of the club in Auto-Call!

Plans for Field Day 1992 were discussed: Rick - N4ASX said that the Ft. Ward Park site used last year had been reserved for use this year by the Alexandria ARC and the Arlington ARC. Activities Chairman Jim - AB4YP passed out a questionnaire asking for commitments of equipment or time for the FD effort, and noted that the Arlington County Chapter of the 10-10 International Net will provide a 10-meter station, including a Bencher keyer, for use by the two clubs. Rick - N4ASX said he would bring his TS-430S if he attended. [He will be preparing to attend the Defense Systems Management College starting in July.] He speculated that others might bring a SB-101, TS-530, an Oscar ground station, and maybe even a commercial communications van with telescoping mast! Stay tuned, MARK JUNE 27-28 ON YOUR CALENDAR, and plan to turn out for Field Day '92 with the Arlington ARC and Alexandria ARC at Ft. Ward Park in Alexandria—always an adventure!

Treasurer Tom - W4LMW noted that the club's Yaesu FT-225 2-meter all-mode rig is now back and had just been set up in the W4WVP shack, although a paper clip had been used

temporarily for the DIN plug jumper that was needed but not provided! He also noted that he had purchased a Daiwa cross-needle SWR meter for "a pretty good price" from HRO using the Red Cross's tax-exempt number.

## John Kanode to Speak at May Meeting

John Kanode - N4MM, Director of the Roanoke Division of the ARRL, will be the featured speaker at the beginning of the May 19 meeting of the Arlington ARC.

## Dennis Bodson to Speak at June Meeting

Club Vice President Dr. Dennis Bodson - W4PWF, who in real life is the Assistant Manager of the National Communications System, Office of Technology and Standards, will talk about emergency government communications at the June 16 meeting. Dennis also co-authored an article on this topic in the March 1992 issue of IEEE Spectrum, and a more technical article on federal standards for HF radio Automatic Link Establishment (ALE) in the May 1992 issue of QST. It noted that "Regardless of whether ALE is ever used in Amateur-to-Amateur communications, it's important for Amateurs who participate in emergency communications to be able to connect to ALE-capable radios that will soon be in government service." The talk is sure to be interesting--and important. Come early—many gather as early as 7.

Mike - NW3V

## Widow's Assistance Program

The Foundation's Widow's Assistance Program has been in operation for many years and has accomplished a great deal for the families of our Silent Keys. The program offers to help widows (and other family members) evaluate and dispose of radio equipment in an Amateur's estate. Listings of Estate Sales are carried in the Shack Sales of Auto-Call magazine free of charge, and major items are offered for sale at local hamfests. No fee or commission is charged the families.

Interested parties should contact a local Foundation member club or call the Widow's Assistance Program at (301) 262-1917

# "Ole Virginia Hams" Amateur Radio Club

Meetings:	Third Monday of each month, 8:00 p.m. Northern Virginia Coop Building 10323 Lomond Drive, Manassas, Virginia
Repeaters:	Voice: WA4FPM 146.97 and 224.66 Digipeater WA4FPM-1 145.09 Digipeater WA4FPM-3 223.40
Net:	Each Thursday, 8:00 p.m., 146.97 and 224.66
Information:	Harry Vorhauer - W4PVA 703-368-6050 Steve Frick - N4OGR 703-361-0008 or Metro 690-6547
Mail Address:	Ole Virginia Hams ARC, PO Box 1255, Manassas, VA 22110

The Ole Virginia Hams supplied safety communications for a County Park Authority sponsored bicycle tour in Prince William County on Sunday, April 12. Several riders were unable to complete the 23 mile circuit and were picked up by park vehicles. One had a tire blow out; a ham called in and stood by while awaiting the pickup vehicle. Participating hams were: K4FHK, K8JOI, K8LF, W4PVA, AB4QV, KA4UFF, KC4ZPM, and KC4ZPN. Both K8LF and AB4QV rode ham radio equipped bicycles in the tour.

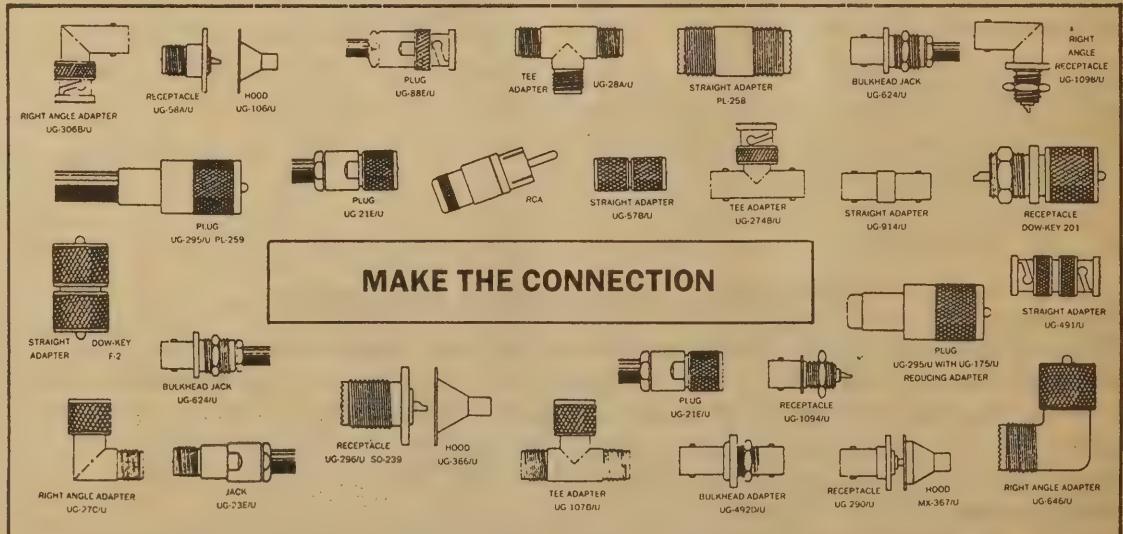
During the April club meeting, a Packet Committee was created. An early action (if not the first) required of the new committee is to deal with the need to relocate the packet

digipeater. A seemingly obvious choice for the antenna is the same tower where the voice repeater antenna is located (the Northern Virginia Electric Coop tower). The antenna cannot be put there, however, due to the possibility of interference with existing antennas and the fact that the tower is virtually saturated. The current plan is to put the antenna on top of the former Hayloft Restaurant building on Balls Ford Road, which is now owned by the Manassas Elks (B.P.O.E. 2512). This move places it on a building top located on some of the highest ground in the county.

Harry - W4PVA  
Mike - N4REI

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Estate sales for Widows Assistance handled by a FAR club will be published without cost.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone and all ads must be pre-paid. Since no effort is made to investigate advertisers, no warranty can be implied.

Copy must be received by the 5th of the month preceding publication.

### WIDOW'S ASSISTANCE

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**FOR SALE:** GONSET Linear Amplifier, Model  
3262, 1200 watts PEP, In good shape.  
Four 811 tubes. Will sell or swap . . . . \$200  
Bob Slaughter - K4BXZ (703) 281-3305,  
Vienna, VA (09)

**FOR SALE:** Ameritron AL 84 Linear Amplifier  
160 - 10 meters, approximately 400 watts  
out. Very good condition . . . . . \$250  
NCG telephone interface, fully automatic tele-  
phone patch works by DTMF tone signals \$150  
Rutland ARAY 4-element 6-meter beam. \$100  
Cushcraft 11-element 70 cm beam . . . . \$40  
Roy Wiglesworth - K04LM (703) 898-0604  
10500 Woodland Drive, Fredericksburg  
Virginia 22407 (06)

**WANTED:** For HEATH HW-2P or HW-4P:  
Battery Cases, Carry Case, Speaker-Mike.  
Other accessories? Nat DeGutz - W2CXB  
(301) 790 0161, Hagerstown, MD (06)

**BUYING:** All Collins - Surplus tube  
inventories -Tube testers - KW Antenna Tuner,  
Johnson, Millen, Murch, Unique Wire Tuner.  
Milton Levy W5QJT, (512) 366-3290, 539  
McCarty #407 San Antonio, TX 78216 (06)

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(06)

## FOR SALE: Miscellaneous Equipment

- Hustler 4BTB Vertical 80 - 10M . . . . . \$50
- Kenwood Station (orig owner)  
(Excellent) TS 520, VFO, 520,  
SP520, MC-50 Mic . . . . . \$550
- 40' Telescoping mast, 18GA, New . . . \$40
- "Rare" Heath 1kW mobile linear  
Amplifier HA-14 with HP-24 AC  
power supply, 80 - 10M . . . . . \$325
- Heath SB-220 Linear (orig owner)  
Excellent, 80 - 10 . . . . . \$550  
All above with manuals
- RG-213U, 250' roll, new . . . . . \$75
- Eimac 3-500Z. New in box . . . . . \$125
- Kenwood 2-Meter Mobile TM241A  
New in box . . . . . \$370
- Astron 12V pwr supply RS-204A New \$80
- Great Ham Shack Computer:  
Commodore SX-64, portable PC with  
color monitor & disk built in,  
MPS801 printer, 1702 color monitor  
with lots of software . . . . . \$300
- New T.I. Silent 700 Terminal . . . . . \$75
- Kenwood TS-700S, Excellent, Manuals \$350
- Heathkit HM102 SWR/Watt Meter . . . \$25
- Bendix M-450 VHF Nav/Comm  
aircraft radio w/manual . . . . . \$100
- Much more. Call Jason - KC4QYX or  
Lloyd - KPMW (703) 444-7243, Sterling (06)

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WANTED: Old, odd, unusual bugs (speed keys). Smiley - WB4EDB, PO Box 5150, Fredericksburg, Virginia 22403 Phone (703) 373-0996. (09)

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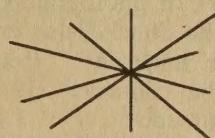
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## AUTO-CALL POLICY

### PRODUCTION POLICY

Copy for Auto-Call will be accepted in any form - handwritten, typed, compatible computer disk or modem. All hard copy is re-typed to preserve uniformity of style in the magazine. We use Word Perfect 5.1 word processing program, Hayes compatible modem (300 or 1200 baud) and can use either 3½" or 5¼" MS-DOS diskettes. We don't do Windows.

In determining space requirements, figure about 600 words per page (50 lines at 12 words per line), including the space taken up by headings, photographs, etc. Either black-and-white or color photos can be used as long as the contrast is good. Master copy, which is to be reproduced directly, should be in black ink on white paper and should be in proper page ratio. (Copy space is 7" wide by 9" high.) Copy can be reduced or enlarged as necessary.

Columns from Foundation member clubs are eagerly solicited and any items of general Amateur Radio interest are most welcome. The editor does reserve the right to edit or reject any portion of any copy submitted and to make minor changes to make copy fit available space.

### SHACK SALES

Deadline for copy is the 5th of the month preceding the publication date. Shack Sales will NOT be accepted over the telephone. Full address must be provided for our reference but need not be published. Each ad must include the call sign or the full name of the advertiser. If the full address is not included, we prefer to include the city along with a telephone number so that readers will know whether a long-distance charge is involved. The entire telephone number - including city and state - is counted as only one word. We do not count postal zip codes. Otherwise, each word, abbreviation, model number or group of letter/numbers is counted as one word. Remittance must accompany each ad.

See next column for additional information on advertising. For further information, phone the Auto-Call editor at (703) 536-8469, McLean, VA.

### ADVERTISING

#### SHACK SALES

Non-commercial advertising of Amateur associated equipment is available to subscribers of Auto-Call at 3¢ per word - with a \$1.00 minimum. Commercial vendors and non-subscriber rate is 17¢ per word - with a \$5.50 minimum.

Special headings or special spacing may be used (e.g., one item per line) but such ads are charged at a column inch rate - \$1.00 per column inch for non-commercial ads, \$5.50 per inch for commercial vendors and nonsubscribers.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone. Since no effort is made to investigate advertisers, no warranty can be implied.

#### DISPLAY ADS

DISPLAY ADS are "boxed" and may contain artwork or photographs. They may be placed along with the Shack Sales or displayed in other sections of the magazine. Requests for specific locations will be honored if practical but cannot be guaranteed.

Display ads are charged according to size and duration of run as shown below. All advertising must be pre-paid for at least the current month.

Rates per Issue						
Page	Col.inch	1 Year	6 Times	3 Times	1 Time	
Full	18	\$75.00	\$90.00	\$100.00	\$105.00	
1/2	9	55.00	65.00	71.00	75.00	
1/3	6	40.00	46.00	51.00	54.00	
1/4	4½	33.00	38.00	41.00	43.00	
1/6	3	22.00	26.00	28.00	30.00	
1/8	2¼	17.00	20.00	22.00	23.00	
1/9	2	16.00	19.00	21.00	22.00	
1/18	1	8.50	10.00	11.00	11.50	

Based on camera-ready copy.  
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Copy must be received by the 5th  
of the month preceding publication date.  
(e.g., Copy for August issue must be received by 5 July)

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# JUNE 1992

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Adams County Dept of State	2 Antietam PG Wireless	3 BARC MARC	4 Anne Arundel	5 Mobileers Shennandoah	6 Stafford <u>EXAMS</u> Virginia Bch Saluda, VA
7	8	9 Frederick ARC Fauquier Woodbridge	10 Pentagon S.Patuxent --- FAR --- At Nat'l Wx Svc	11 AMRAD MADRAS Mt. Vernon No. Virginia	12 Alexandria So. Maryland Vienna	13 Stafford <u>EXAMS</u> Alexandria Laurel, MD Manassas, VA Harrisonburg
14 MetroCom	15 Ole VA Hams Sterling Park	16 Antietam Arlington BRATS	17 BARC Goddard MARC	18 Anne Arundel QCWA #20 <u>EXAMS</u> Towson, MD	19 Rock Creek Shennandoah	20 Capital City Tri County NCDXA <u>EXAMS</u> Laurel
21	22 <u>EXAMS</u> Camp Springs	23 Columbia	24 Laurel AFCEA Luncheon <u>EXAMS</u> Glen Burnie	25 MADRAS St. Marys	26 New Carrollton Vienna	27 Stafford <b>FIELD DAY</b>
28 Adventists <b>FIELD DAY</b>	29	30 Columbia	31 QCWA #20			

NCDXA Net every Sunday 147.420 at 8:30 p.m.

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